A COMPUSERVE PUBLICATION PRINTED MONTHLY/ONLINE DAILY

ONLINE TODAY

THE COMPUTER COMMUNICATIONS MAGAZINE

September 1987 $2.50

PLAY-BY-PLAY

Catch the Action with Sports Services

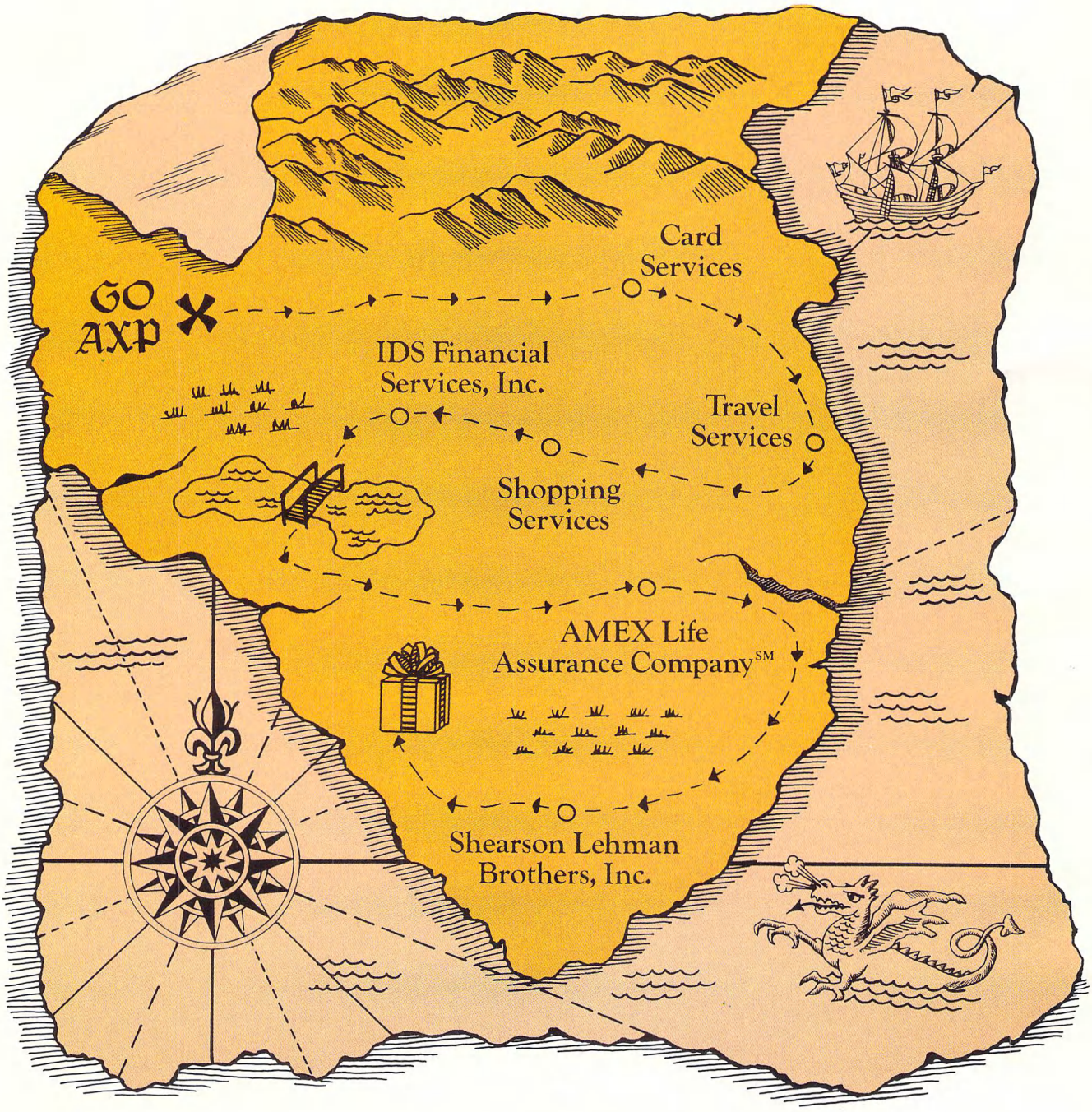
TRACK RECORDS

Hollander Keeps Pace with Race Results

LEARNING LINK

Students Connect to Colleges

DISCOVER ADVANCE



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For details of The Scavenger Hunt Game, type **GO AXP.** Good luck!!

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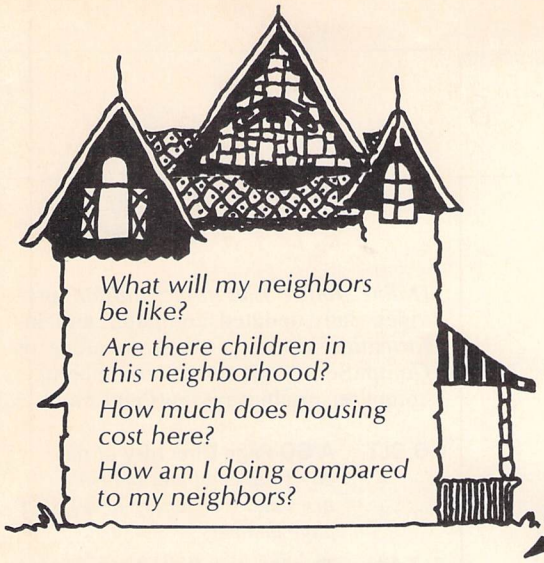
The one database that knows who's who and what they do in every U.S. ZIP code

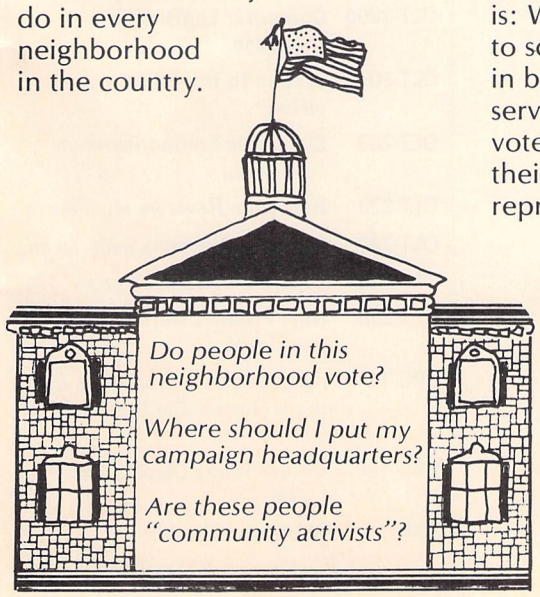
NOW AVAILABLE!


What will my neighbors be like?
Are there children in this neighborhood?
How much does housing cost here?
How am I doing compared to my neighbors?

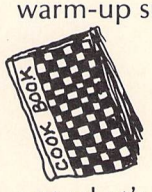
Looking for the right gift? Searching out a new neighborhood? Trying to sell your home? Looking for volunteers or customers? Here's the database for you! It's CACI's NEIGHBORHOOD REPORTS.

These reports are super-simple to run. Simple to read. And easy to pay for! Yet they contain some of the most authoritative, up-to-date facts available on income, lifestyles, wish-lists, and housing data. All compiled by CACI—the authority on demographics and market information.

So if you can type "GO DEM" and think of a ZIP code, you can connect with who's who and what they do in every neighborhood in the country.



• GIFT REPORT Whether you're buying for clients or Great Aunt Hattie, here's a great starting point for finding an appropriate gift! Wine...mystery novels...jazz... warm-up suits...



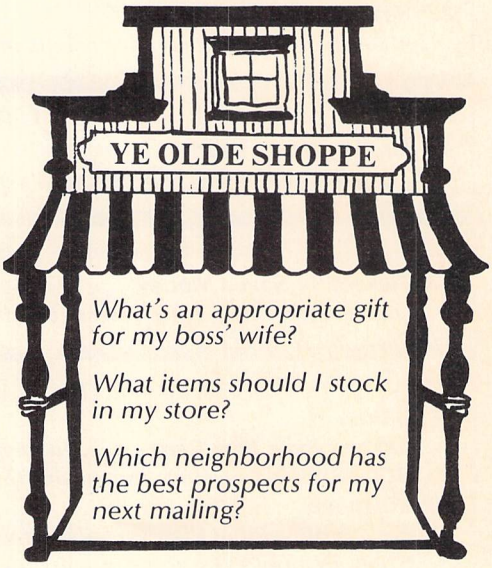
cookbooks... educational toys... stocks and bonds ...Here's a light hearted way to find out what's "in" in the neighborhood.

• SPORTS & LEISURE REPORT

From baseball and aerobics to gardening and entertaining at home, here's how the neighbors spend their free time.

• CIVIC/PUBLIC ACTIVITY REPORT Here's how to find out how civic-minded a neighborhood is: Whether the people belong to school or hospital boards...are in business, religious, or public service clubs... whether they vote and volunteer...if they write their congressional representatives...

• DEMOGRAPHIC REPORTS Want to take a quiet peek at how much the neighbors earn? What professions they are in? How old the houses are and how much they cost? Here's the way to do it!


YE OLDE SHOPPE
What's an appropriate gift for my boss' wife?
What items should I stock in my store?
Which neighborhood has the best prospects for my next mailing?

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ELECTRONIC EDITION

Online Today Electronic Edition provides daily-updated computer and information industry news, coverage of CompuServe services, commentary, computer product reviews and more.

GO OLT **A GO-Page Directory** *of the day's top computer industry news and a summary of key OLT page numbers.*

OLT-160 **The Monitor Daily News** *main menu.*

OLT-90 **Today's Computer and Information Industry News.**

OLT-20 **The Current Week's Monitor News.**

OLT-130 **Behind the Screens.** *Computer and information industry news, rumor and gossip.*

OLT-50 **CompuServe Update** *main menu. Lists all CompuServe news departments.*

OLT-70 **What's New on CompuServe.**

OLT-80 **CompuServe Community News.**

OLT-120 **Forum Conference Schedules.**

OLT-140 **Beginner's Corner.**

OLT-175 **Columns by Dan Gutman.**

OLT-3500 **Online with Charles Bowen.**

OLT-3700 **Uploads.** *A bi-weekly column summarizing new files in forum data libraries.*

OLT-1000 **Computer Events Calendar.**

OLT-2000 **OLT Special Reports.**

OLT-3000 **Computer Legislation Database.**

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OLT-230 **Software Reviews** *main menu.*

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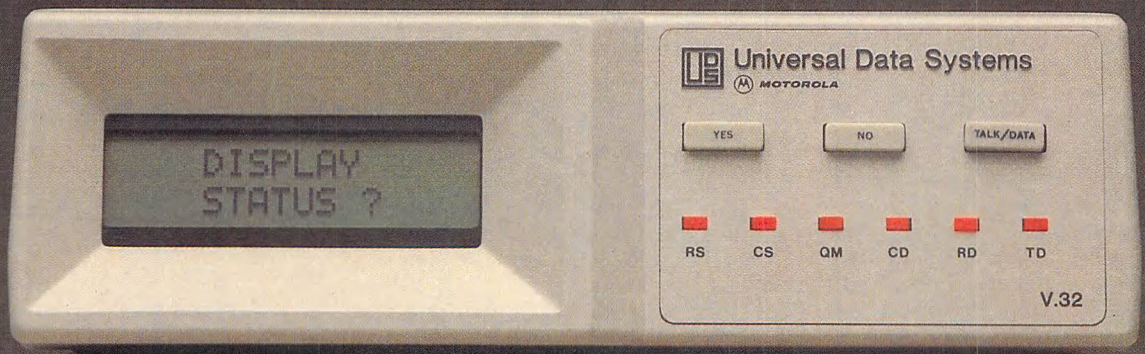
OLT-250 **New Product Announcements** *main menu.*

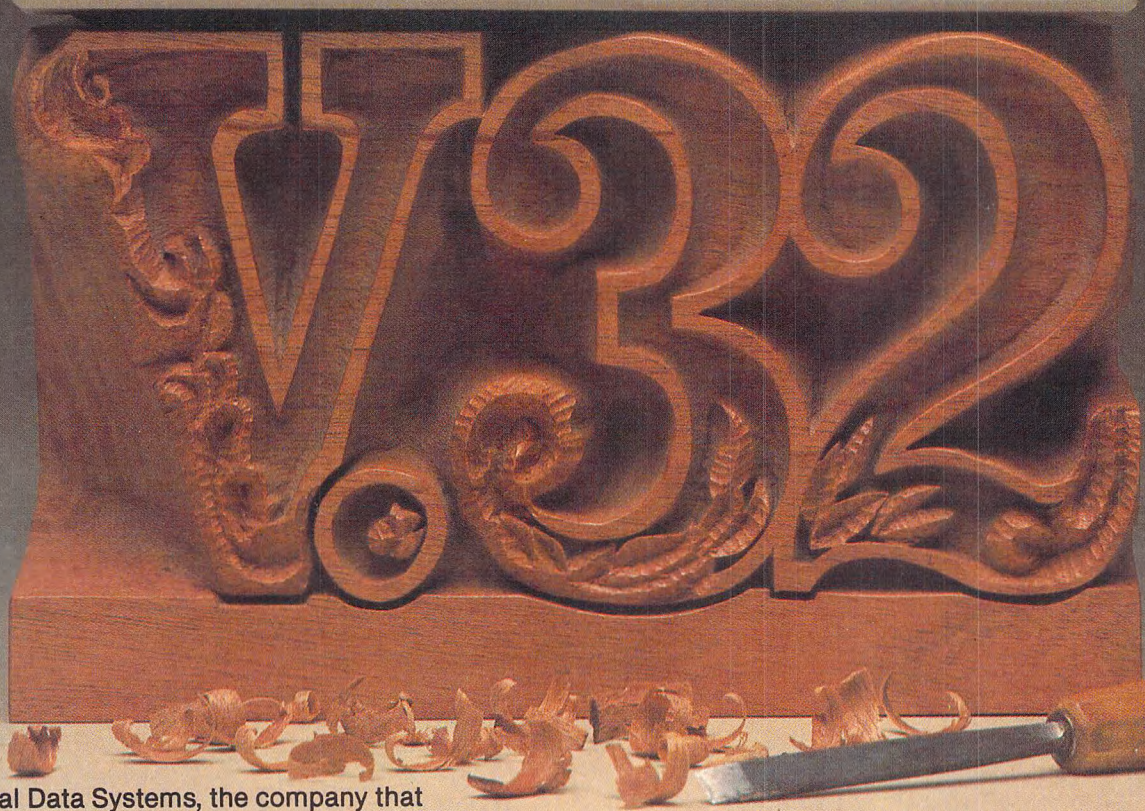
EBB-11 **Instructions** *on use of the Electronic Bounce Back reader service system.*

EBB-160 **Online Today Display Ads** *main menu.*

EBB-70 **Shopper's Guide.**

A special kind of craftsmanship





Universal Data Systems, the company that developed the first 9600 bps dial-up modem, has now applied its special brand of craftsmanship to the CCITT V.32 specification.

The result is a *full-duplex* 9600 bps device for the switched telephone network. When substandard line conditions are encountered, the device offers automatic fallback to 4800 bps, while maintaining the full-duplex communications capability.

As you expect from UDS, the device fully utilizes the latest in CMOS technology for low-noise performance and very low (less than 20W) power consumption. A new LCD control panel displays and configures modem set-up selections and displays outputs from the unit's comprehensive self-test regime. Auto-dial capability is also included.

If your system must accommodate periodic bursts of high-throughput, full-duplex communication, UDS craftsmanship and the V.32 standard provide a reliable, cost-effective solution. For complete technical details and quantity prices, contact Universal Data Systems, 5000 Bradford Drive, Huntsville, AL 35805. Telephone 205/721-8000; Telex 752602 UDS HTV.

$2495.00
Quantity One

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Universal Data Systems

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DEAR READER

There's something about collegiate sports teams that inspires lifelong loyalty in fans. Maybe you live in Los Angeles now but you still root for your alma mater, Notre Dame, instead of nearby UCLA. Or perhaps your alma mater isn't one of the "Big Ten" schools. You may get frustrated in your attempts to find in-depth coverage of out-of-town teams in the local papers.

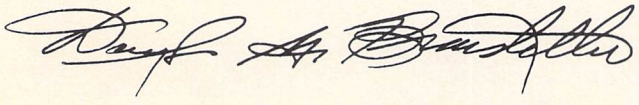
Now there's a way to follow your favorite teams and players even if you have relocated halfway across the country. The Executive News Service on CompuServe lets you set up electronic clipping folders that catch wire stories matching the keywords you specify. For tips on how to set up a folder, see "Sideline Spirit" on page 20.

In addition to using sports news services, you can mingle with other sports participants and fans in online forums for sailing, auto racing, outdoor activities and sports in general. Since online sports aren't hampered by the clock, season or weather, electronic huddles continue year-round. Also, you'll find specialized reports in the forums. For example, during the America's Cup races, results and competition gossip were uploaded daily from Australia. *Sail* magazine personnel logged on live before each contest so that forum members could ask questions. In addition to providing facts, the two-way communication promoted camaraderie among the fans who gathered electronically. To find out more about how to catch the action online, see this month's cover story, "Play-by-Play," by Holly Miller, on page 14.

If you've always dreamed of owning a football or baseball team, you can do just that — for a season — through fantasy sports leagues in the Sports Forum. You'll be in charge of drafting and trading players, tracking statistics, budgeting and doing whatever you can to make your team a winner in the All-American or All-National League. For more information, see "Fantasy Sports Players Manage Real Teams" on page 18.

* * *

Also in this issue, read about a new way to continue your education conveniently by enrolling in the Electronic University Network. Whether you're interested in completing a degree or taking additional courses to enhance professional skills, you'll be able to access the wisdom of professors from Boston University, Penn State, the University of Illinois and other schools. You'll attend "lectures" through online conferencing areas and upload assignments to your professor's electronic mailbox. To find out more about this new concept in education, see "Linking Up to Learn" on page 41.



Douglas G. Branstetter
Editor

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Volume 6 Number 9

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Editorial Director
Richard A. Baker
Editor
Douglas G. Branstetter
Art Director
Thom Misiak
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Mary Mitchell
Contributing Editors
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Copy Editor
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ADVERTISING SALES
Associate Publisher
Nanette M. Traetow, 5000 Arlington Centre Blvd., Columbus, OH 43220; 614/457-8600
Northeast Hajar Associates Inc., P.O. Box 345, Norwood, MA 02062; 617/769-8950; Paul Hajar, Carol Andersen
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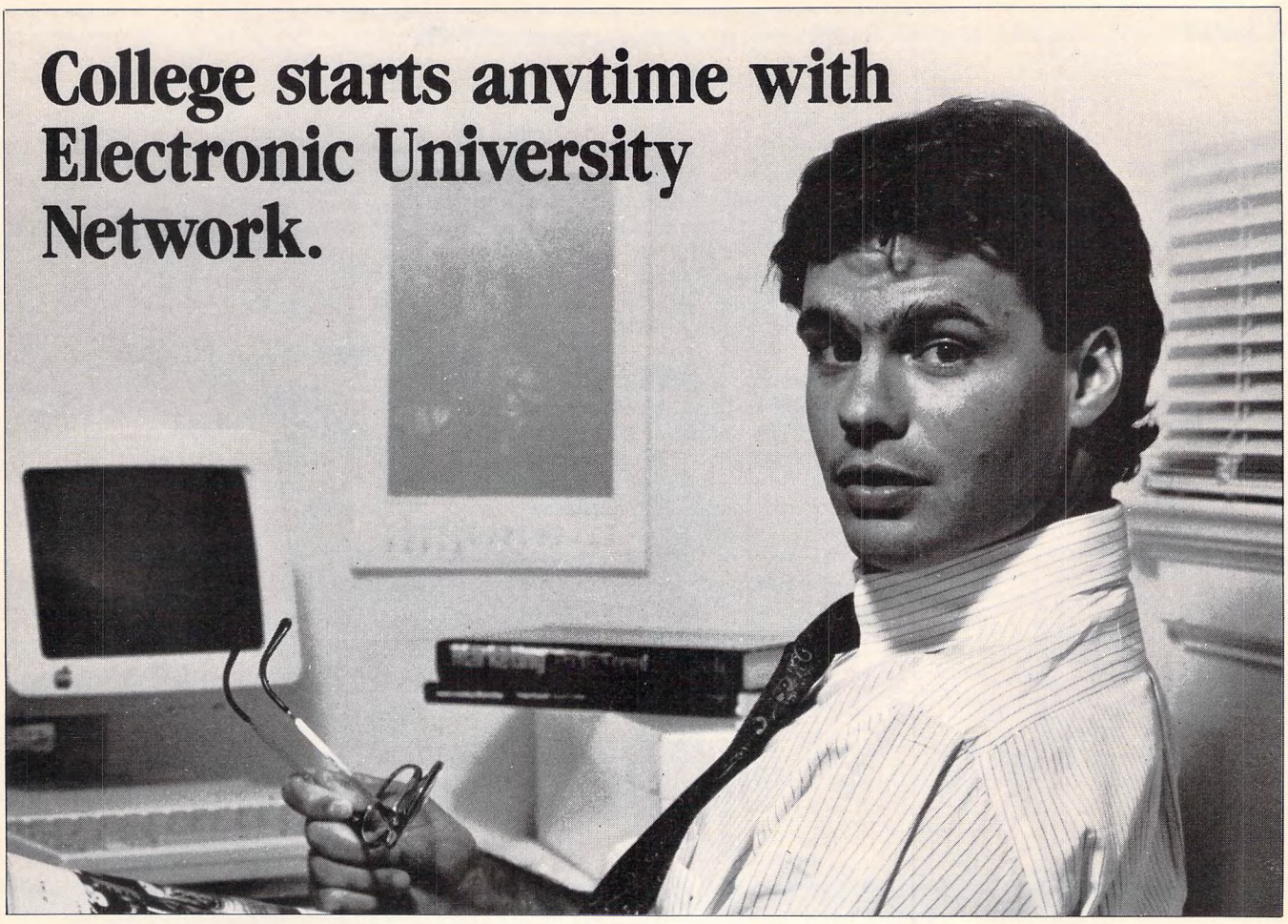
College starts anytime with Electronic University Network.



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For some time now I've wanted to go back to college and complete my degree. But with a demanding job, a family, a busy schedule, it's not easy to find the time. On-campus education is just not practical for me.

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LETTERS

SearchExpress Review

We are responding to the review of SearchExpress (June Reviews, *Online Today Electronic Edition*). We sent the early version of SearchExpress to you for review in late 1986. Since then, we have had periodic updates of the package including some new features (such as Hypertext) and some minor bug fixes.

For *Online Today* readers who would like to see the latest version of SearchExpress for themselves, we are offering a 30-day satisfaction guaranteed or your money back on our 1-million document magnetic version ($349), if they mention this letter. This offer will expire Oct. 1, 1987.

Scott Schram, VP
Executive Technologies
Birmingham, Ala.

International Features

I am an international user of CompuServe and I think it is a great system. I have never read anything about the international aspects of CompuServe and would like to know more about international users' interests and access procedures. I recommend featuring an international corner or foreign guest.

Werner Krag
Wiesbaden, West Germany

Coverage of Wozniak

Online Today Electronic Edition Monitor's recent stories on Steve Wozniak's problems with his wife and with the occupant of a plane he piloted are unnecessary and irrelevant to the subject matter ostensibly covered by this service. The fact that one or both of the stories was reported by the Associated Press does not make them appropriate for a computer/communications industry news publication. If Wozniak's activities or problems related directly to computers, communications or technological involvements, they would be appropriate.

Benn Kobb
Falls Church, Va.

Call Waiting

Could you please refer me to the proper database with the program that halts "Call Waiting"?

Carol Mackey
Derby, N.Y.

Editor's Note: The IBM Communications Forum (GO IBMCOM) offers a BASIC program to avoid call-waiting problems: file CW.BAS in Data Library 2. For more programs and textfiles, see the "Uploads" column on page 44 in this issue.

Talk to Us

Online Today Electronic Edition has a Feedback area for letters to the editor. Simply type GO OLT-33 from any prompt in the CompuServe Information Service.

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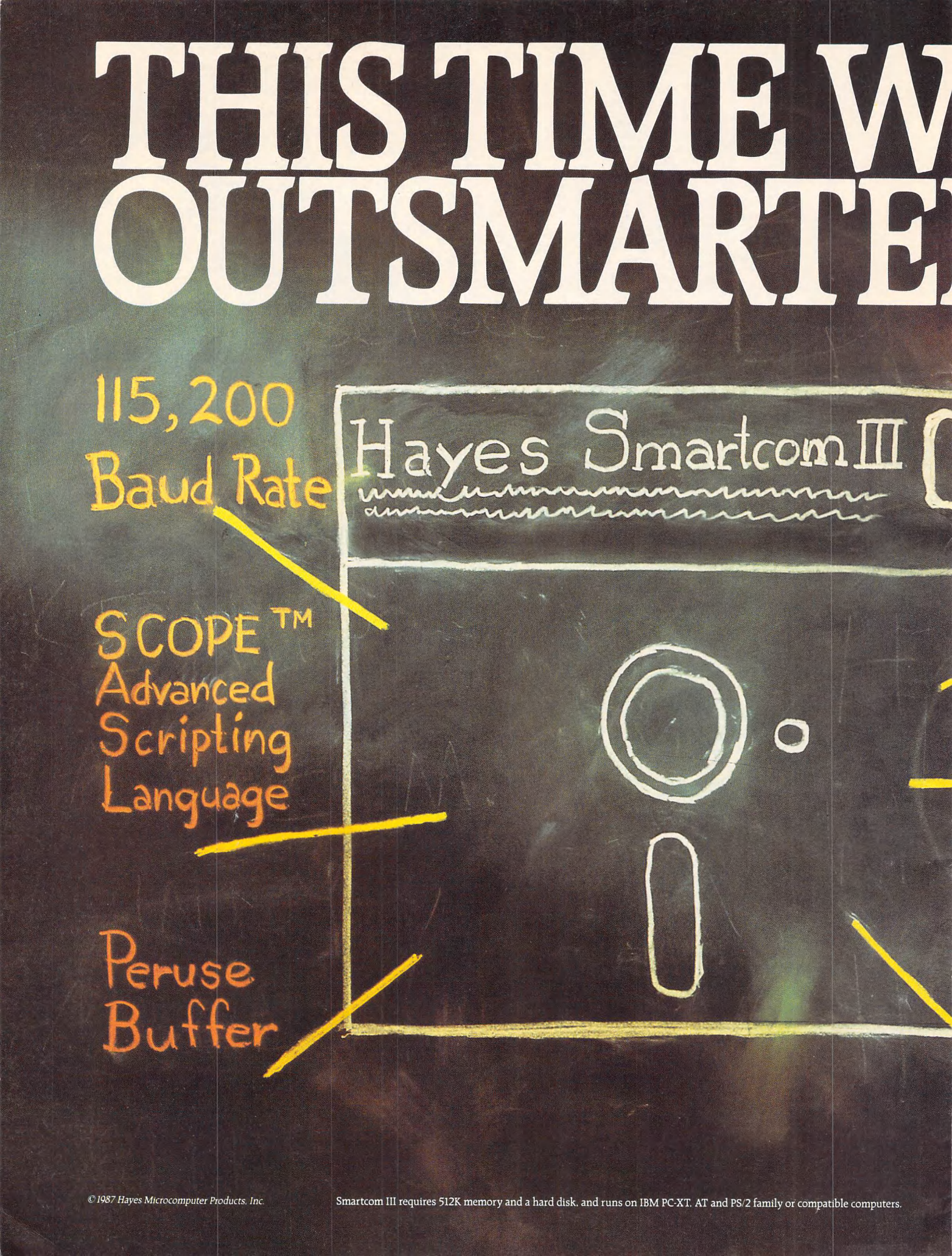

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Smartcom III requires 512K memory and a hard disk, and runs on IBM PC-XT, AT and PS/2 family or compatible computers.

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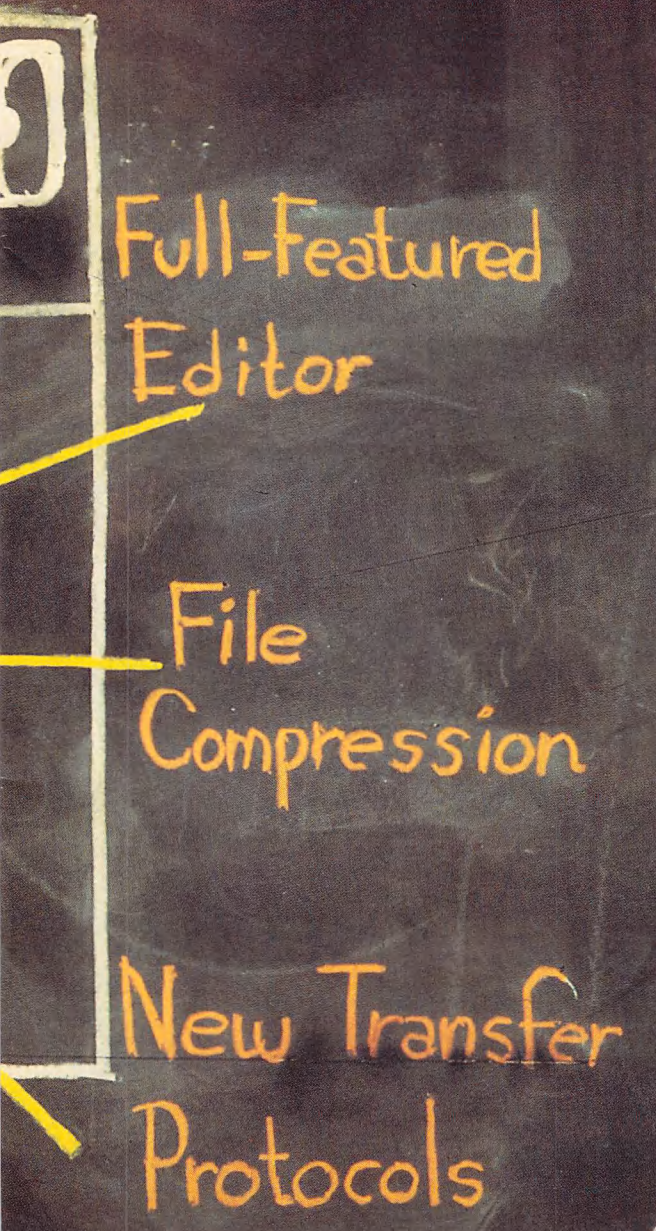

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Subscribers Can Help Maintain Security

Stories of those who illegally access online database services, order merchandise with stolen credit card numbers and bypass long-distance telephone charges are prominent in the press these days. But not so prominent are stories of average citizens who have decided to do something about it.

One such person is a CompuServe subscriber living in the Southeast. An active member of one of the computer forums, "Joe" (not his real name) was offering technical advice on programming in the conference area one evening. One person in particular asked him numerous questions, which he graciously answered. After the session, Joe jokingly said, "My fee, by the way, is $100 per hour." The reply he received startled him: "I can't pay that, but I can arrange for you to have some free time on CompuServe."

Joe continued discussions with the individual over the next several weeks. He learned that the subscriber was a

King Associates

teen-ager from Reading, Pa., who had signed up for CompuServe using account numbers from credit card carbons stolen from the trash of a local shopping center. The teen-ager gave Joe a number of "free" passwords to CompuServe.

Joe alerted CompuServe's security department to what was happening. CompuServe was aware of illegal access in the Reading area and asked Joe to stay on the case. He did.

While Joe was having late-night conference sessions with the Reading teen-ager, CompuServe security, in coordination with the Reading police and the Secret Service, was on the tail of the teen. The evidence Joe provided for the investigation served to corroborate police findings.

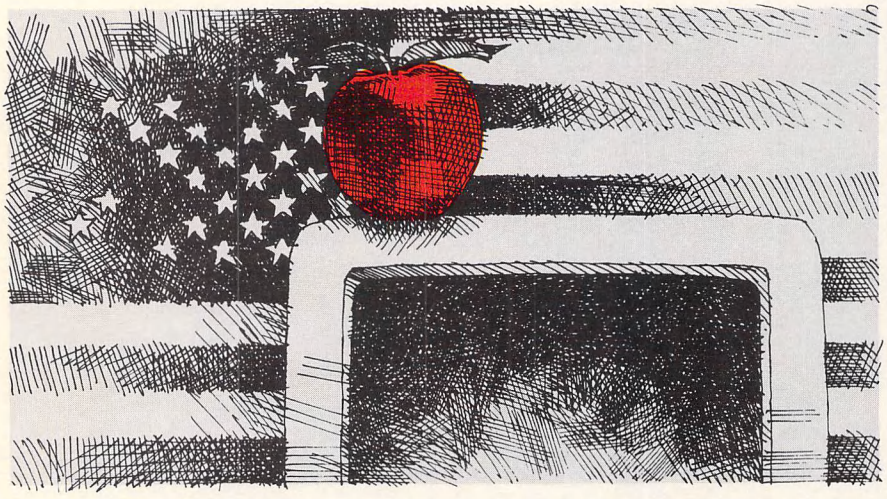
In a matter of weeks, five teen-agers from Berks County, Pa., were apprehended. Joe's name was on the affidavit.

He is proud of what he did and says he would do it again. Based on his experience, he offers this advice to CompuServe subscribers:

- Don't give anyone your CompuServe password.
- If you demonstrate the system to someone, change your password later.
- Keep the carbons from all your credit card transactions.

Subscribers who witness or suspect fraudulent online activity should report their findings to CompuServe via Feedback (GO FEEDBACK). There are no connect charges for time spent in Feedback.

— Cathryn Conroy



Congress Salutes Computer Learning

Being literate in the 1980s means more than just knowing the ABCs. It also means knowing a bit from a byte and how to use a word processor. To this end, Congress has declared October to be Computer Learning Month.

Special activities to mark the event are scheduled around the country, including an exhibition of children's computer-inspired activities, a time capsule to be opened in the year 2001, national contests and "back-to-school" nights for parents who want to learn more about this high-tech wizardry.

Organized by leaders in the computer industry and education fields, the national non-profit campaign will target the nation's schools, encouraging students, educators, parents and community leaders to explore the potential of computers as learning tools.

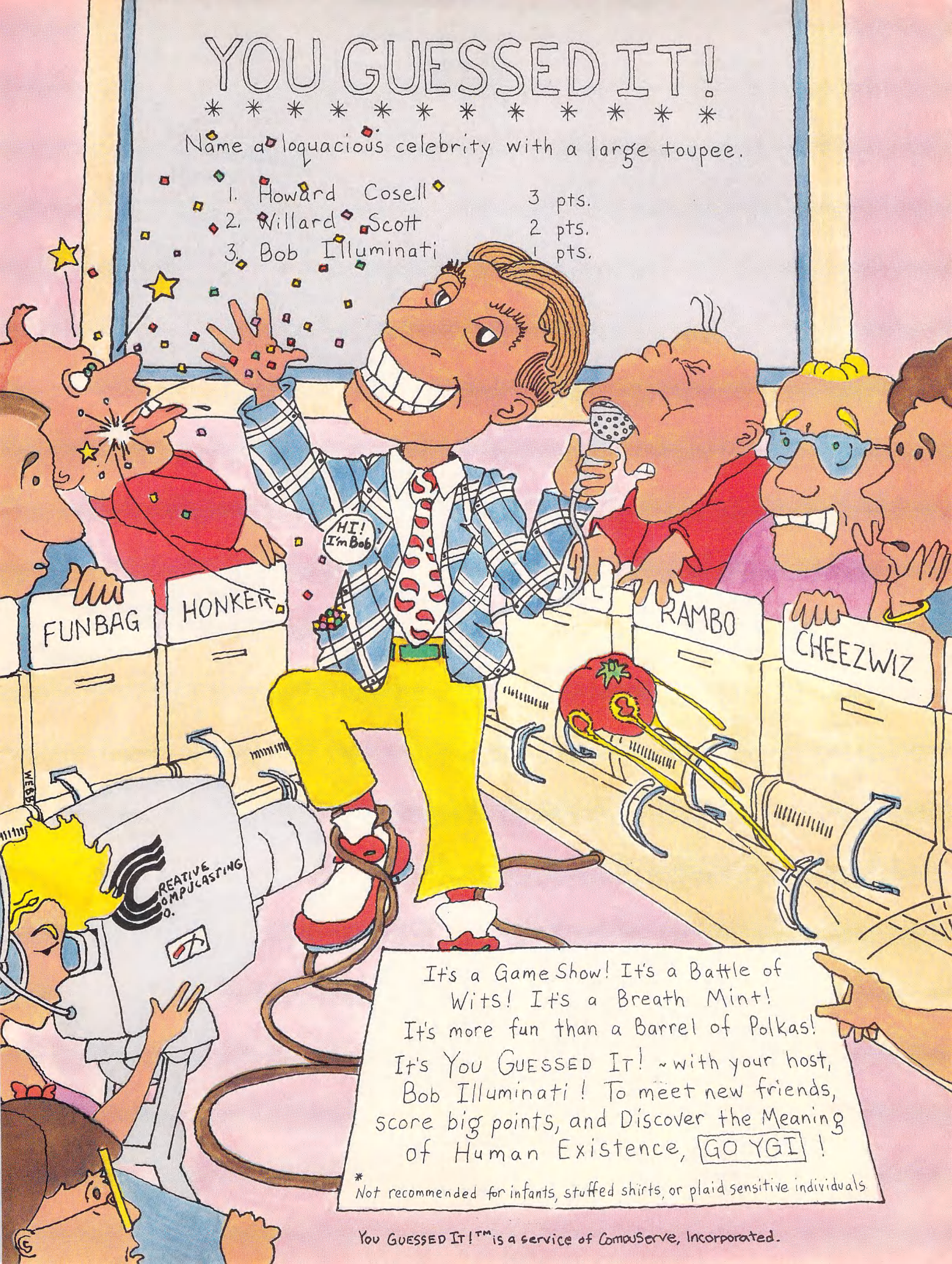
"It is an opportunity to take a close look at how our kids are using computers and to acknowledge the strides in education made possible by teachers who effectively use the technology," says Ken Wasch, executive director of the Software Publishers Association.

"What's important about computer learning isn't the mastery of technology by whiz kids and hackers, but how millions of ordinary kids are using computers to develop critical-thinking, academic skills and creativity."

CompuServe's Education Forum will be a part of the special October events. The forum will sponsor an essay contest for parents and teachers, according to forum administrator Chuck Lynd. Entrants will be asked to describe in one to two pages a specific example of a learning activity in either a home or school setting that illustrates the benefits of computers in the learning process.

Prizes will be awarded for the best essay submitted by a parent and for the best submitted by a teacher. For more information on the essay contest, contact Chuck Lynd in the Education Forum (GO EDFORUM). For information on Computer Learning Month, contact P.O. Box 19763, Washington, DC 20036-0763; 202/223-4338.

— Cathryn Conroy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Name a loquacious celebrity with a large toupee.
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2. Willard Scott 2 pts.
3. Bob Illuminati 1 pts.
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* Not recommended for infants, stuffed shirts, or plaid sensitive individuals
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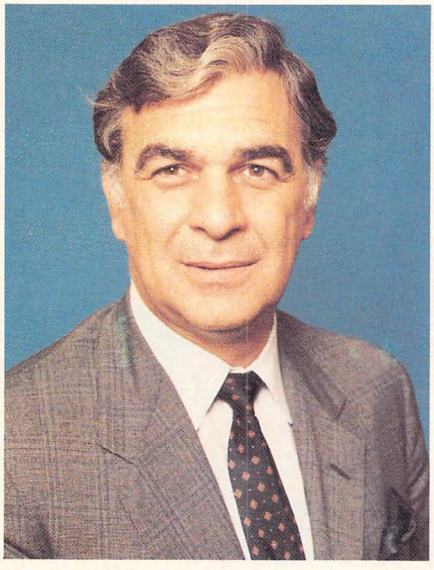
Company Buries Former Chip Industry Stars

Old semiconductor companies don't just die and they don't fade away — they fall into the hands of Bob Isherwood.



Closing companies: *Isherwood*

Isherwood runs The Directorate Inc., a Carrollton, Texas-based company that specializes in shutting down victims of America's sagging computer components industry. Isherwood's company advises clients on how to close their semiconductor operations with the least hurt to employees and to the bottom line.

The Directorate has its roots in the 1985 closing of United Technologies' Mostek Division. Isherwood, who at the time worked for UT, was charged with closing down the division in an orderly fashion. He eventually sold Mostek to Thomson Components of France and decided he liked the idea of running a business that buries the former shining stars of the US semiconductor industry.

Since then, Isherwood and his 35-person staff have handled the dissolution of billions of dollars worth of chip companies. In addition to his consulting work, Isherwood handles the sale of factories, equipment and excess stock. "It originally developed as a sideline to the main consulting business. Now, sometimes, it accounts for the majority of the business," he says.

But although The Directorate is a success story pulled from the ashes of tragedy, Isherwood refuses to boast about his success. "The business is doing well, but I'm too much of a patriot to gloat over it," he says.

More details are available from The Directorate, 214/466-1234.

Bogus Bulletin Hits Rockford with Humor

The best thing about computers is their terrific sense of humor. For instance, a while back, a National Weather Service computer issued an erroneous bulletin stating that a tornado had demolished the city of Rockford, Ill. (population 140,000).

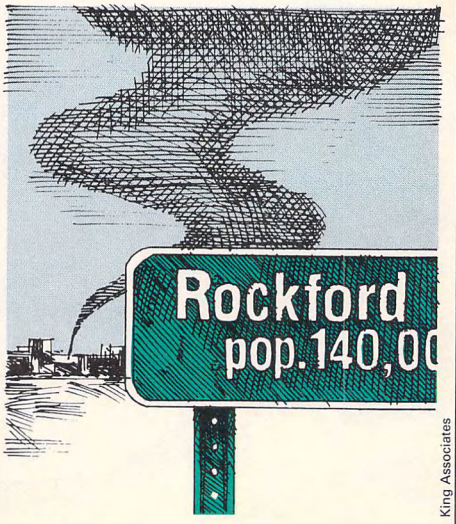
The bulletin, sent by wire to newspapers and radio and television stations across the Midwest, stated: "At 4:35 a.m. CST a tornado hit the Rockford, Ill., weather office. This storm was moving southeast at 50 mph. This is a dangerous storm. Take cover immediately." It continued: "The entire town of Rockford has been demolished. If you are in the path of this tornado, you should go to a basement shelter if available . . . Abandon cars and mobile homes."

Area newscasters, who weren't aware that computers like a good practical joke as much as anyone else, dutifully relayed the news to their listeners. The reports were of great interest to the citizens of Rockford, who hadn't noticed any demolished buildings lying around town lately.

A Weather Service spokesman eventually apologized for the mistaken missive, blaming the mess on faulty software. But a jovial John McNamara, mayor of Rockford, claimed the mistake was part of a Chamber of Commerce plan to promote the city. "It is all part of the scheme, and as long as they spell the name Rockford right, I'm happy," he said.

All of which proves that computers can entertain as well as inform.

— John Edwards



King Associates

Computer Model Has an Eye on the Ball

September is the time for pennant races. Therefore, it is only natural for our thoughts to turn to baseball (and computers, of course).

Now comes the startling news that a computer has actually figured out what makes a knuckleball, er . . . knuckle. Joel Hollenberg, an engineer at New York City's Cooper Union School, has it all down to a science.

Hollenberg claims he can predict a knuckleball's path with almost unerring accuracy. He has devised a system "using Newton's laws of motion to help predict the trajectory, using the drag, weight and lateral force," he said. "We used the equation to create the first three-dimensional computer model that illustrates the trajectory of the ball as it travels to home plate," Hollenberg noted.

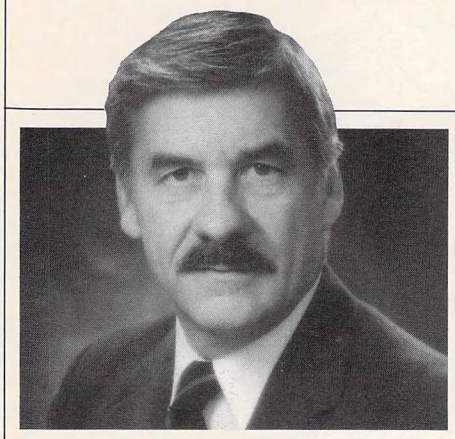
Uh-huh. But can the computer follow the ball's course as it sails over the "410" sign? Hollenberg is silent on that point.

Abuse Victims Find Help Online

It has been estimated that there are 10 million adults living in the United States who are survivors of childhood sexual abuse. Now, these people, many of whom still suffer great psychological pain, can find help online.

The "I Was Abused" section on CompuServe's Human Sexuality Forum B (GO HSX-200) provides a place where victims can share experiences, ideas and opinions. "I Was Abused" functions as a support network, helping victims deal with problems that can include sexual dysfunction, flashbacks and poor self-esteem, according to section leader Rebecca Scott. The section sponsors regular conferences with experts on the abused and includes a database of resources available to abuse victims.

"I Was Abused" welcomes anyone with a concern about childhood abuse; you don't have to be a victim yourself to join. Further details are available from Rebecca Scott, 76146,2622.



Systems for the future: *Selven*

Parallel Processing: Wave of the Future

"Parallel processing architecture will spearhead the growth in high performance computer system design," according to Gene Selven, publisher of *The Impact of Parallel Processing on High Performance Computing Applications.*

By 1990, Selven forecasts, the worldwide high-performance computer market will double in size from $20 billion in 1985 to $39.6 billion. During that same period, parallel processing design architecture, used in 22 percent of the total systems shipped in 1985, will grow to 48 percent by 1990.

Although superminis and mainframe applications will represent a total of 87 percent of the dollars shipped in 1990 using parallel processing, a new category of computers (database processors, mini-supercomputers, array processors and symbol processors) will emerge to represent more than a $1 billion market by 1990.

Parallel processing uses multiple arrays of central processing units operating in unison, allowing the computer to process information 10 to 100 times faster than older uniprocessor systems. As detailed in the report, parallel processing architectures are strongly influenced by such hardware issues as VLSI circuitry, gallium arsenide ICs, megabit memory chip developments, faster internal channel speeds, hybrid optoelectronic circuitry and advanced circuitry cooling technology—all of which are rapidly becoming available.

Demand for super-high-performance computing in scientific/technical fields, while a primary driving force in the early market phase, is not the only factor influencing the rapid growth of the parallel processing market, notes the study. Uniprocessor-based architectures are approaching the theoretical limits in processing speeds. Other limitations include slow input/output linkages to application-limited array processors and networked systems, and the lack of suitability by general purpose minicomputer or mainframes for high-performance computing.

Initially, parallel processing will impact three segments of the computer market: supercomputers, in the $5 million to $15 million range; mini-supercomputers, a relatively new class in the $1 million to $5 million range, and superminis in the $.5 million to $2 million range.

While hardware-related technologies will fuel the development of parallel processing computer systems, software issues represent the primary roadblock to rapid implementation, according to the report. The design of true parallel processing operating systems, the choices of higher level languages and the design of optimizing language compilers are the major impediments to growth of parallel processing computer systems.

More details on the report, which is priced at $1,485, are available from Electronic Trend Publications, 12930 Saratoga Ave., Suite D1, Saratoga, CA 95070; 408/996-7416.

— John Edwards

Program Predicts Breast Cancer Growth

A joint venture between US and Dutch physicians has resulted in a computer program that can predict breast cancer growth and a patient's response to therapy.

To use the program, the physician enters various clinical data, including the extent of lymph node involvement, the number of lymph nodes affected and the types of treatments being used. The software uses the information to predict if the patient will survive and be free of cancer cells, according to Dr. Michael Retsky of the University of Colorado, who helped to develop the program.

So far, the program appears to be very accurate, Retsky noted. In a test that involved 45 breast cancer patients, the computer predicted that 95 percent of the subjects would survive without a trace of the disease. In reality, 98 percent survived and remained disease-free.

More information is available from the University of Colorado, 303/492-0111.

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PLAY-BY-PLAY

Fans Catch the Action with Online Sports Services

by Holly G. Miller

Each September when Tom Theriault, a diehard Red Sox booster, issues that old Boston challenge—"Wait till *next* year"—he doesn't really mean it.

As administrator of CompuServe's Sports Forum, Theriault can still root for the home team and swap baseball tales long after fellow Fenway Park fans have called it a season. Because sports online aren't hampered by the clock, the season or the weather, electronic huddles continue year-round.

"The term 'fan' comes from the word 'fanatic'," explains Theriault. "And some of us definitely are."

In its eight years of existence, the Sports Forum has seen its ranks burgeon from 200 to 1,500 members. Such growth is not surprising since CompuServe subscribers have consistently indicated a penchant for the sporting life—both as participants and spectators in real competition and in the fantasy variety (see related story).

"It used to be that subscribers came online for their computer needs," says Linda Thoirs, CompuServe product manager. "But our focus groups are showing us that more and more people are signing on because of special interests such as sports and hobbies.

Online sports coverage has an advantage, according to Thoirs. Sports stories from the Associated Press news wires can be delivered fast and unedited. No story is eliminated, paragraphs are never abbreviated and statistics are not deleted by editors who are out of space or broadcasters who are out of time.

"We get our sports stories as soon as AP releases them—the same time the television stations and newspapers get them—and make them available to subscribers immediately. There's no longer the need to wait for the newscast," says Carrie Ford, CompuServe product marketing specialist. "Users have them immediately, and we keep each story online for 24 hours. The total number of sports stories that are available at any given point is constantly changing."

And the volume is mind-boggling. On a heavy sports weekend, hundreds of sports stories are available on the state and national wires during a 24-hour stretch. In the fall, for example, these stories include the baseball pennant races, the NFL's opening games and coverage of high school and college football.

But what about fans who prefer to travel in faster circles (ovals)? Auto racing buffs find that the Auto Racing Forum (GO RACING) is the natural place to make quick friends—literally.

"What members like most about the forum is the opportunity to find out the results of major races quickly," says George Ryerson, assistant forum administrator. "Except for those events that are broadcast live on radio or television, the forum is the fastest way to find out who won. We also are more complete with results, listing the finishing order of all the entrants, while radio and television give only the top five or six."

Ryerson, forum administrator Mike Hollander and their network of race reporters actually attend and give live coverage to the major auto races across the country. These events range from 6-second drag races to 24-hour endurance chases.

At the 71st running of the Indianapolis 500 last May, Hollander and his staff filed continuous updates, two and three minutes apart, from the Speedway's Infield Press Room. Like other members of the media, they described the pageantry—from the singing of the National Anthem to the pace lap to the checkered flag. But unlike other reporters, they included an explanation of the mechanical problems that caused certain cars to drop out of the race.

"Another advantage of the Auto Racing Forum is the two-way nature of the communication," says Ryerson. "If a member has a special interest in one driver or team, our reporter on the scene can find out answers to questions or pass along messages."

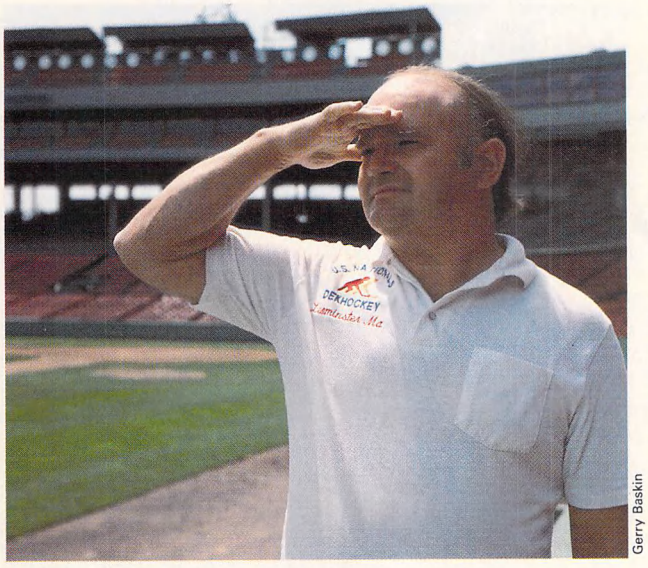
This two-way conferencing also works well away from the track. Forum members gather on a regular basis for weekly sessions on Thursday nights (9:30 p.m. EDT). "There is an opportunity to compare notes and share opinions," says Ryerson. "We sometimes have guests at these conferences, such as Dale Earnhardt and Elliott Forbes-Robinson. For members who can't attend, transcripts of the conferences are kept in the data libraries."

Such exchanges of "shop talk" are equally valued in the Sailing Forum where members check in regularly on Monday (9 p.m. EDT) and Saturday (10 p.m.). As in the Racing Forum, reports are filed from around the world and include plenty of inside information not available elsewhere.

"We've found that sports activities are particularly popular online if the forums provide material that users can't find immediately in other media," explains Linda Thoirs. " You don't turn on the 6 o'clock news and get much coverage of sailing. The fringe or 'satellite' sports don't attract a lot of attention. You have to wait until the coverage comes out in a monthly magazine. It is in sports such as these that the CompuServe Information Service adds value."

Sailing Forum members, however, have access to up-to-date information provided by *Sail* magazine, a forum consultant. During the America's Cup races, results and racing gossip were uploaded daily from Australia. Spreadsheets were created and information was provided on each race. *Sail* magazine personnel logged on live before every contest so forum members could ask questions and hear about the competition. In addition to providing facts, the two-way communication promoted a feeling of friendship among the fans who gathered together electronically to watch and share the historic events.

"I've been a boater for a long time and I'm attracted to like-minded people," says Brion Lutz, assistant administrator of the Sailing Forum. "The camaraderie of the Online Yacht Club's digital bar is renowned as a place where armchair boaters can gather for



Gerry Baskin

Rooting for the online team: *Theriault coaches Sports Forum*

tips on charters, cruises, inlets and boat construction, and technical advice from other sailors and boaters."

As important as this kind of interaction is among sailors and racing enthusiasts, it takes on added emphasis when the shared sport is slightly more obscure, non-competitive and less likely to be covered by the media. Bikers, backpackers, bird watchers and fans of other rugged outdoor activities feel they have an inside track on the outside world when they enter the Outdoor Forum (GO OUTDOORS).

The group was formed four years ago by administrator Alan Davenport, a resident of rural northwestern New Jersey. His sports activities include fishing, hiking, backpacking and photographing wildlife. The assistant administrator is Aileen Rashkin, a naturalist with 400 hours of wilderness survival and tracking to her credit.

"The forum is for anyone who loves the outdoors," says Davenport. "We have members who ski, rock climb, are into search and rescue, and are Boy Scout and Girl Scout counselors. Our data libraries contain everything from programs for tracking tides and maintaining a fishing database to information on parks."

Members meet in conference on Sundays at 9 p.m. EDT, and Scout counselors gather to swap ideas on Saturdays at 9 p.m. Contributors to the library files are as varied in their lifestyles as they are in their sports interests.

Warren Whitcomb, who describes himself as a "51-year-old quad bedbound," not only frequents the electronic Outdoor and Sailing Forums on a regular basis, but brings with him observations on Texas wildlife and reports on such boating activities as the all-day, all-night river race from San Marcos to Seadrift, Texas. Since he helps with the ham radio communications of the race, he can track the action from his home.

In his messages to members he urges other housebound CompuServe subscribers to view library sports files as windows in their four-walled worlds. When he offers accounts of birding activity in his home community of Calhoun County, he prods readers to get involved with the lifelong, no-cost sport, even if it can be enjoyed only through someone else's eyes and read via computer screen.

"CompuServe is a whole possible world for me," he says. "The forum administrators are my family. I can escape into the Outdoor Forum and find great pen pals."

"We know subscribers like their sports, so now we're trying to find out exactly what kinds of sports activity they'd like to have next."

Linda Thoirs

If some databases can spark an interest in a sport, others can give advice on how to train for the sport (GO SPORTS) and still others can provide the necessary equipment (GO MALL).

A fitness-minded CompuServe subscriber looking for an activity more strenuous than bird watching but less rigorous than backpacking, may find the answer by visiting the sports medicine area and checking the energy requirements of various activities. This list indicates the amount of energy expended by a participant in a certain sport. The measurement is in METS, a unit of oxygen consumption for a given weight over one minute. Remembering that athletes in training should workout at an intensity of 5 to 6 METS, the most rigorous activity listed is running a 6-minute mile (17 METS). The least strenuous is slow cycling (3 METS).

The sports medicine database also discusses the health hazards of some sports, offers tips on developing a training regimen, explains the pros and cons of an activity (running won't develop the upper body but it will burn about 100 calories per mile) and suggests the kind of equipment required. Runners are told the type of shoes to wear and swimmers are advised on the correct pool temperature (70 to 74 degrees).

If all the talk first creates an interest in a sport and then a need for equipment, The Electronic Mall is the logical next stop. Here pool owners can visit Rin Robyn Pool 'N Patio and order everything from hot-tub wraps (for guests who arrive suitless for a dip) to a floating thermometer to the basic rubber ducky (GO RR). Serious cyclists can stop by the Bike Barn and find a bicycle computer that will monitor speed, cumulative distance and elapsed time. Handlebar grips, inner tubes, tire irons and bike bells also are in stock (GO BB).

Of course not all sports fans covet such active participation. The more laid-back spectator who emphasizes the "leisure" part of "leisure activity" can don a pole sitter's T-shirt and pit-crew jacket (GO BUICK at The Electronic Mall) and be off to the races without ever leaving his keyboard. Or play 18 holes of electronic golf and then call the signals on a rigorous Advanced Digital Football game and still use 1.5 METS of energy a minute (GO GAMES).

Whatever the pastime, there's a place for the sports fan online. Seats are available at the race, there's no waiting for yacht club memberships, and rain never delays tee-off time. As much sports activity as currently exists, more can be expected in the future. According to product manager Linda Thoirs, periodical surveys are planned to poll users' thoughts on sports.

"We're trying to identify the hot button," she says. "We know subscribers like their sports, so now we're trying to find out exactly what kinds of sports activity they'd like to have next."

Holly G. Miller, a contributing editor of The Saturday Evening Post *and* Indianapolis Magazine, *is a free-lance writer based in Anderson, Ind. Her CompuServe User ID number is 70007,2345.*

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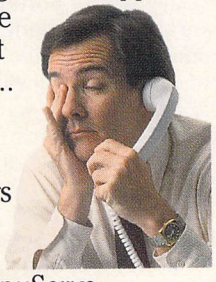

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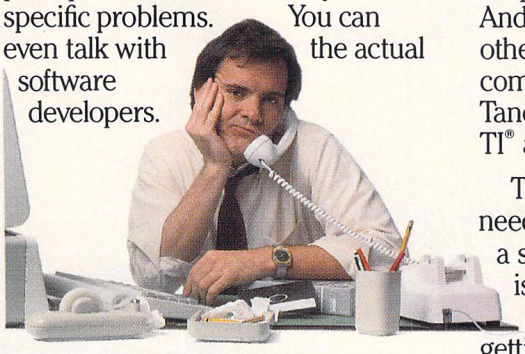

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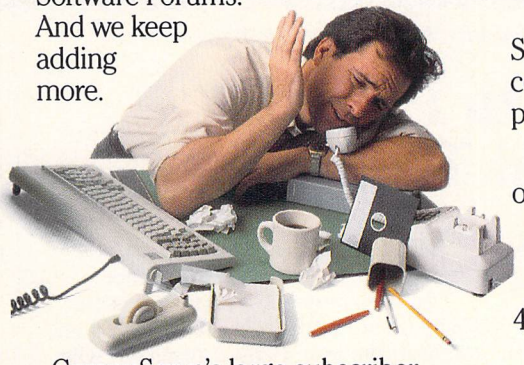

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Barry Goldenberg

Like father, like daughter: *Chuck and Samantha Wright manage All-American teams*

Fantasy Sports Players 'Manage' Real Teams

When Sam's Sluggers slid from first to fourth place in the All-American League last May, team owner Sam Wright studied the roster and made a quick power play. Within a few hours Ricky Henderson joined the line-up.

"Good trade," mused Sam. "Things should go better now."

As one of 105 team owners in the Sports Forum's fantasy baseball leagues, Sam plays by the rules but breaks with tradition. Only 10 years old, Sam is a fourth grader and a catcher for a New Jersey Little League team . . . a girls' team. Her full name? Samantha Wright.

"The attraction of the fantasy baseball leagues is that they're based on baseball, which is a great game anyway," says Chuck Wright, Sam's father and owner of the Wright Angles, another All-American League contender. "Being a team owner is sort of like being a lesser George Steinbrenner."

In the course of a fantasy season, players are drafted, traded, waived and sent to the minors by "owners," who often take their duties as seriously as their Big League counterparts. The fantasy version of the game has even produced a baseball widow or two. Evie Knight, wife of RAKateers owner Roger Knight, cheerfully laments, "My husband lives for the game. He checks the messages three times a day and has lists, rosters and standings all over the house." Another forum member had been involved in fantasy football on a local level for more than five years, but negotiating trades via mail or over the phone had its drawbacks.

"A group of friends get together and hold a draft," explains Linda Thoirs, CompuServe product manager. "After that, everything is done over the telephone. Trading doesn't work very well because in most local leagues everyone has a job. They're the type of people who aren't that easy to reach on the phone. When you call three times and don't connect, you give up. The interaction isn't as high as it is online where you can use electronic mail."

After searching the system and polling the Sports Forum's membership, sports fans concluded that electronic fantasy leagues didn't exist. At least not yet. If their questions failed to yield the answers they wanted, they generated a lot of interest. *Somebody* ought to launch a league or two, they thought.

On Sept. 3, 1986, eight members of the Sports Forum gathered for the first online football draft conference. Two nights later a second league draft was conducted. Sixteen teams emerged, representing such veteran NFL cities as Chicago and Dallas, and a few newcomers to the pro gridiron ranks — Salem, N.H.; Virginia Beach, Va.; and Westfield, Mass. By the end of the first

football season the concept was so popular that baseball buffs were waiting on deck to field their teams.

"When we posted the notice about baseball, the activity in the forum went crazy," recalls Thoirs. More than 100 people signed up; not everyone who wanted a team got one. We settled on 10 leagues, each with 10 or 12 teams."

The concept is simple: A league must be either All-American or All-National. The goal of an owner is to assemble a roster of 23 players whose cumulative statistics outscore the competition's. Eight categories determine team performance: composite batting average, total home runs, total RBIs, total stolen bases, composite ERA, total wins, total saves and composite pitching ratio. Team owners must work within a budget and be aware of young rookies with potential and aging veterans with punch who can be acquired at bargain prices but who will contribute in the eight key areas.

"Before the draft I put down all the stats of the major players, graded them in the categories that count and came up with a formula," says Chuck Wright. "I got point values for the various players, and while a lot of the obvious players were drafted right away, some of the middle-range players with more points, according to my system, were available. I picked up a few and they've done very well."

The work isn't over after the 23-man line-up has been drafted. Adjustments can be made throughout the season. The sharp owner is constantly tracking his players' stats and making trades to improve the team's standing.

"This is a skills game," says Thoirs. "You can't put your team on autopilot and expect to win. There's a certain amount of luck, but the skillful player, over time, generally wins over the lucky player. The owner has to be familiar with the talent in the leagues and make judgments as to which players are good, which are bad, who's getting better and who's getting worse. A lot of this is player evaluation."

Luck is a factor, however, when it comes to injuries. One early fantasy league participant, Josh Peckler, remembers the football season when he built a team around his first-round draft pick only to have the star sidelined with a knee injury after the first ball possession of the year. His only consolation was that he wasn't alone in the anguish he suffered as owner. His NFL counterpart—the man who held the real contract on the injured running back—also had to deal with the loss of the player. This kind of believability is one of the reasons fantasy league owners find the game so appealing.

"The concept strikes a bell with certain people," says Thoirs. "This is what they'd like to do in real life. They'd like to own a professional team, but it costs millions to buy one. For a small investment they can own a fantasy club for a season. The forum members have tried to develop a game in which people can mimic what goes on at the top level. They've built in a player salary structure so owners have theoretical financial concerns that must be worked out."

The time commitment of overseeing a team depends, "on what kind of nut you are," the diehard participants say. Wright estimates he spends 20 minutes a day reading the sports pages of the newspaper, paying particular attention to the box scores. He notes the performances of his players and Sam's; since Sam takes a more casual approach to team ownership, a glance at the weekly standings is enough for her.

"You have to look for the hidden things," says Wright. "You've got to spot the budding superstar before everyone grabs him. You find yourself watching a lot more sports on television and reading the newspaper more carefully."

Because of the early success of the online leagues, sports fans already are requesting expansion: more leagues, more sports. Basketball would be the likely choice as a third fantasy activity; hockey would be next. But some sports work better than others, depending on popularity, schedules, whether or not it is a team or an individual sport and the availability of statistics.

Football is especially successful as a fantasy sport because of the way the games are scheduled. Contests are slated once a week, usually on the same day, and they're often televised. Fantasy team owners can watch the players perform, then they have a week to study the stats and adjust their rosters by making trades before the next clash.

"There's something about football that makes it perfect for this kind of thing," says Thoirs. "In basketball, what percentage of the games can you see? With football, you can go to a good sports bar and watch them all at the same time."

And then, after the contest on the field, the real game begins at the keyboard as messages are posted, offers are made and deals are struck. The action heats up when the stadium lights go down.

"Fantasy sports is a national phenomenon still being defined," says Thoirs. Sports enthusiasts are starting to suggest new ways to play the game. As long as the team owners agree, the participants can set their own rules within the leagues, according to Thoirs. "Because the online medium allows new ways for participants to communicate, it's the ideal playing field."

— HGM

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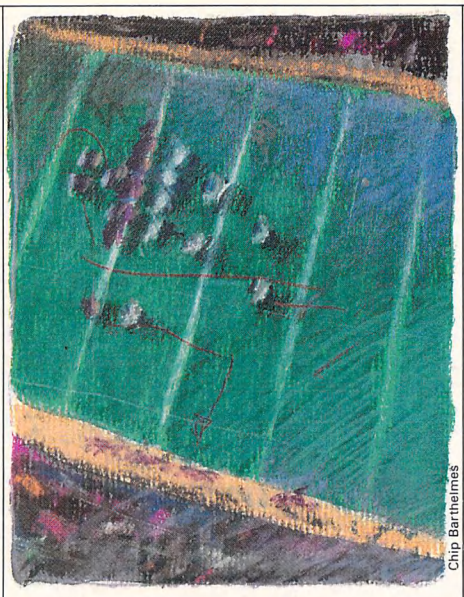
Sideline Spirit

Fans Follow Teams, Players Through Online News Wires

Loyal sports fans hate to miss the smallest tidbit concerning their favorite teams or players. But many are forced to go without the stories, scores and statistics they crave because their teams are located in other cities. College sports fans in particular have a tough time getting complete information on their alma maters. What these fans need is a personal clipping service that gives them the sports news they really want, when they want it.

In fact, such a service exists on CompuServe: the Executive News Service. ENS monitors all of the Associated Press national and state news stories, looking for articles containing designated words and phrases. The AP files thousands of sports stories a week on professional, college, and even high school sports. ENS sifts through this wealth of sports information and gives you the stories you need.



Chip Barthelmes

Here's how ENS works:

If you're interested in college football and you want to follow Notre Dame in particular, access ENS (GO ENS) and select "Create a Clipping Folder." You'll be asked to give a name for your folder (any name up to 10 characters, such as IRISH). Next you specify an expiration date — the date you want to stop clipping stories. You may want to follow the Irish through the bowl game and even through recruiting and spring practice, so you could enter a date in May. You are also asked to enter a retention period for clipped stories, that is the number of days stories are to be kept in the folder if you don't delete them (14 days is the maximum).

Next, you'll be asked to designate the AP wires you would like to scan. You will want the AP Datastream national wire, which carries major sports stories. In addition, you will want to scan the Indiana wire and maybe the California wire (to track archrival USC). Then you need to choose a news category to monitor; in this case it would be "Sports."

Finally, you are prompted for up to seven key phrases. These are the exact

Identify yourself as an IBM enthusiast and your December *Online Today* will be built with your needs in mind.

That's right! We're constructing a special editorial section in the December issue. It's devoted entirely to the needs of CompuServe subscribers who are also IBM users. And will be included in issues sent to qualified subscribers.

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Make sure that we know about your interest in IBM online computing.

- If you are a recently active member of an IBM-related forum, you've already made the list.
- If you were once a member, but haven't visited for a while, stop in and renew your membership.
- If you want to be absolutely sure to receive the insert, type GO SIGNUP and register for the insert.

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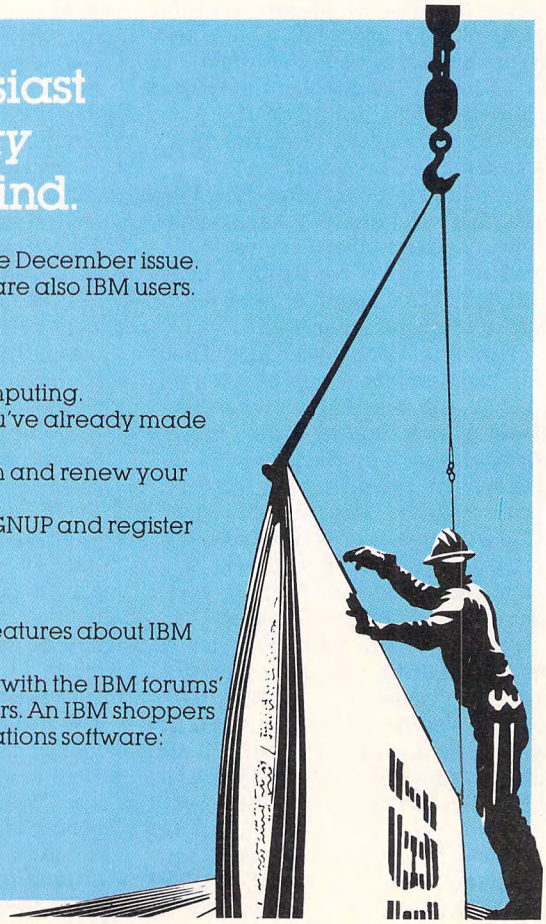


words and phrases ENS will look for in stories. Some possible phrases include NOTRE DAME + FOOTBALL, LOU HOLTZ, FIGHTING IRISH. Note that the "+" sign indicates that both NOTRE DAME and FOOTBALL must be in a story before it is clipped. If you would like to follow another team, such as Ohio State, and aren't sure if it will appear as "Ohio State" or "Ohio St." in an article, you can use OHIO ST* to give you stories using either phrase.

Once you've entered your phrases, ENS goes to work. As soon as the AP files the stories on the wires, they are checked against your folder. If there is a match, the story is clipped and held in your folder. You can read the story at any time and you are charged only for your connect time, even though ENS works around the clock to find stories.

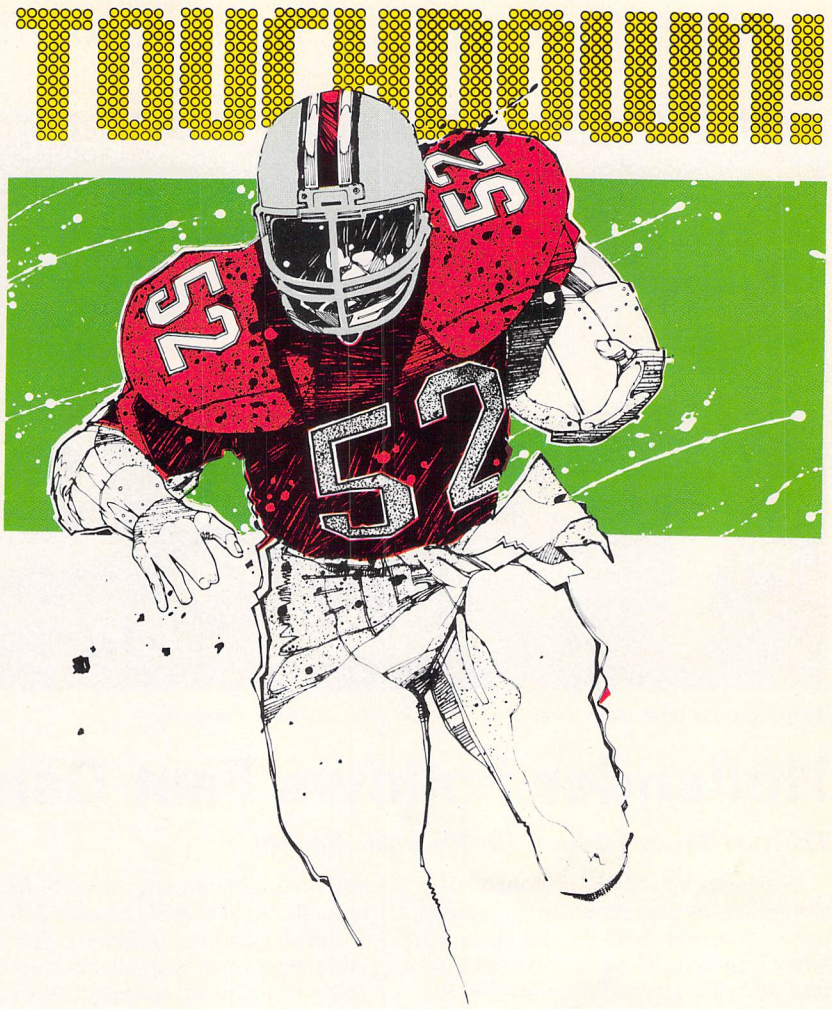
If golf is your game and you want to follow the tour as it stops in Fort Worth for the Colonial National Invitation Tournament, access ENS and select "Create a Clipping Folder." You could name your file Golf, specify a file expiration date following the tournament's last round and indicate the number of days you want to hold the clipped stories in the folder (this will depend on how often you plan to check the file).

When you're prompted for which news wires you want to monitor, specify AP Datastream; and when the same menu reappears, this time with an asterisk next to "Datastream," choose the "AP State News Wire" option. When you're offered a list of the 50 AP state wires, select "Texas," since the tourney is occurring in Fort Worth and local sports writers will cover every aspect of the contest. You won't want to miss a single birdie.

A final menu will ask you to select a category. From the nine choices, select Option 8, "Sports." At the last prompt, enter up to seven key phrases ("COLONIAL NATIONAL INVITATION").

The clipping service is especially helpful to fans who want to track minor league sports, small-college athletics and out-of-town events. You can set up one folder to follow college football, another to track your favorite NFL teams and a third to clip stories on the baseball playoffs or even your old high school team. You won't miss a score or story on your teams, even if you have moved halfway across the country.

— HGM



Football has been a favorite pastime of online sports fans on CompuServe for several seasons. Pick a team name. Select offensive formations. Call plays. Punt? Pass? Kick? Coach, it's your call.

Interested? Let's huddle. We want to tell you that CompuServe's football league has been expanded to address more sophisticated aspects of the game.

This season we're pleased to announce the formation of the **Advanced Digital Football League**. This simulation includes timed quarters of play, a time clock, time outs, a variety of play formations (you can also create your own) and an online "Assistant Coach" (whose advice you're welcome to ignore)!

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Drafted? Not signed? Get in either game! Just type GO FOOTBALL or GO ADFL at any prompt on the CompuServe Information Service.

Ron Hussey

Keeping pace with the races: *Hollander provides lap-by-lap reports*

Hollander Follows Fast Cars

The Auto Racing Forum is His Electronic Newspaper

Six years ago Michael Hollander would lug his computers to a racetrack press room, set them up and go to work almost unnoticed. As cars roared by, he filed lap-by-lap reports for CompuServe's Sports Forum. At that time, only about five or six race fans sat at home in front of their personal computers to read the results.

Today, 700 to 800 CompuServe subscribers access the Auto Racing Forum (GO RACING) each month, often for immediate race results, says Hollander, the forum administrator. When Hollander or one of his 17 assistants throughout the nation walks into a track press room, other media people come to them. "When we're sitting at the track in Atlanta, they ask us what's happening in Phoenix," Hollander says of the press. "They know we can get to CompuServe and find out what is going on in other races."

Don't call Hollander, 40, a racing junkie. He is a reporter and the Auto Racing Forum is his electronic newspaper. With his half-dozen or more press passes and a portable computer, Hollander often makes the rounds of West Coast race tracks on weekends from his Santa Monica, Calif., home to report live for the forum. "When the checkered flag falls, I usually hit the Return key that sends results saying who won," he says. At major races not staffed by a forum volunteer, results still are online no later than 10 minutes after the final flag. These are culled by Hollander and his assistants from wire and media reports. Hollander trades many of his news stories to other services that, in turn, share their information with him.

Like any news reporter, Hollander wants to make a deadline. That means reporting race results as soon as possible. Auto racing does not get the same coverage as larger sports, he says; yet fans hunger for behind-the-scenes details and results. "The stick-and-ball fan, the baseball fan and the hockey fan can turn on any television set on a Sunday night to get a report of their events. Racing fans cannot," Hollander explains. "They have nowhere to turn until the racing paper shows up two weeks later." With computers, some of the nation's 63 million racing fans can get results as quickly as the cars careen around the track, he says.

That lack of racing information led Hollander, director of product information for a Los Angeles advertising company, to begin race reporting in the mid-1970s. Always an automobile buff, Hollander says his interest grew when he bought his first Nissan (then Datsun) Z sports car in 1970 while in the Navy. He was a founding member of a Z-car club in northern California—which now has 600 members—and editor of its newsletter. He became editor of the *National Z-Car Club* magazine in 1974 and decided to report on races. Quickly he discovered his press pass was low priority and would not admit him to the best tracks. To get better admittance, he did race reports for several small radio stations and eventually free-lance reports for magazines, the Associated Press, ABC and NBC. He then realized the immediacy an online service could offer and began reporting for CompuServe.

The Auto Racing Forum's precursor was a racing data library that overloaded the Sports Forum it was a part of. Racing information then became its own forum. Today Hollander packs it full of items such as race results, driver biographies and lists of hotels located near races. He works three hours or more each night during racing season (April through November) organizing and adding information. Many of his weekends are spent at the track.

Each Thursday an online conference is held—often with a special guest race-car driver. Other drivers, course workers and race fans throughout the country usually join in. Hollander knows many personally. He has authored two books, *The Complete Datsun Guide* and *The New Mazda Guide*—which fostered his interest in computers—and is director of Racing Information Systems, his reporting service. "I can't be a real racing fan," he says. "While I can write about Porsche and Chevrolet, it has to be from an unbiased viewpoint. I've always enjoyed reporting, and that is what this job is," he says of the forum.

Racing strategy fascinates Hollander the most, and a race is but the climax to the qualifying, testing and setting up. He has never raced, yet can cite turns and layouts of many tracks as though he has driven them. Car-shaped pillows and other automotive items decorate the condominium he shares with his wife. One room houses automotive posters and a collection of about 200 matchbox-sized cars.

Hollander wants to see the Auto Racing Forum continue to grow and would like to begin a motorcycle forum and a general automotive forum. After the next Indianapolis 500, he has an idea for an online conference. "We're working on something special," he says. "If Mario Andretti wins, he and Paul Newman could be guests together."

— Jennifer Lowe

CompuServe offers you the guidance you need for file downloading.

Would you completely ignore something that you knew would enhance your personal computer's capabilities? Probably not. Unfortunately, that's what too many personal computer owners do when it comes to downloading valuable program files from the data libraries on CompuServe.

To remedy this problem CompuServe has published forum software downloading guides for the **Amiga, Atari 8-Bit, IBMNET, Macintosh User** and **Tandy Model 100 Forums**. These *Best of ...* guides are a collection of the most popular files as determined by the members of each of these five forums.

File retrieval made more efficient.

The guides make downloading more efficient by providing a comprehensive tutorial and a keyword index. Also, specific information is presented about each individual file including name, size, description and location. All of this helps you access files directly once you're in the forum, reducing online search costs.

Order online by entering GO ORDER. Guides are $9.95 each plus $2.00 postage and handling. If you're not a subscriber, order by calling (800) 848-8199 or (614) 457-0802 in Ohio, Alaska or outside the United States. Please specify which guide you would like when ordering.

CompuServe®

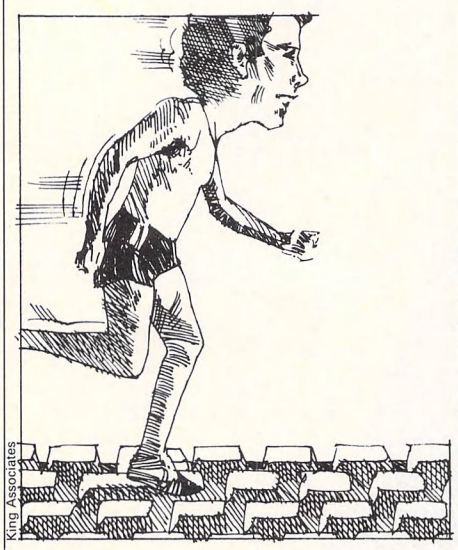
Information Services

Set Forum Subtopics to Speed Message Board Scanning

CompuServe forums have expanded within the last year to meet the interests of those who use them for information, education and entertainment.

Each forum has the potential of being divided into 18 message subtopics and data libraries, numbered 0 through 17. Many forums do not have all sections and data libraries activated for public use, but as time goes on and demand from forum users increases, the forum administrators will be able to create new subtopics.

That can present a problem to forum users who are not interested in all subtopics of a forum message board. For example, in my own forum (the Good Earth Forum), message subtopics range from ornamental gardening to vegetable



gardening to natural nutrition to folkways to pets. Everyone interested in discussing pets may not be interested in gardening. And those who want to learn more about vegetable gardening may have no interest in folkways or even ornamental gardens.

Does that mean that a forum member reading the board has to wade through every message just to read those from the subtopics that interest him? Not at all. Each user can tailor every forum's message board to suit his or her needs. All that's required is flipping a few switches.

They're not real switches, but if you think of them as switches, the job of customizing a forum to suit your needs will be easier.

To begin the task, choose the Options Menu from the main Function Menu of any forum. From this User Options menu, you can do more than customize your message subtopic selection, but it's the selection labeled "(SU) Subtopics" that you need to choose to select only the subtopics you want to read.

If you are a new member to a forum and you have not already tailored your message subtopic selection, you usually are given access to all public subtopics in the forum. That means when you choose the "Subtopics" selection from the User Options menu, you'll see a list of public subtopics with an asterisk enclosed in brackets before the name of each one.

For example, in the Good Earth Forum, new members would see the following:

```
 1 [*] Homesteading
 2 [*] Vegetable Gardening
 3 [*] Ornamental Gardening
 4 [*] Nature's Way
 5 [*] Folkways
 6 [*] Nutrition
 7 [*] Pets
 8 [*] Help
 9 [*] Humus (earthy jokes)
10 [*] General Information
 N [*] Add new subtopics
Enter choice!
```

The asterisks after the subtopic numbers mean that those message subtopics are "turned on" for you and you will be able to read all messages in that subtopic section of the bulletin board. If you want to turn one or more of the subtopics off so you will not see them in the course of reading or scanning messages on the message board, you simply type the number of the subtopic you are *not* interested in at the "Enter choice !" prompt located at the bottom of the Subtopic Selection menu. If there is more than one subtopic you want to turn off, type the numbers separated by commas.

When you press the Return key after your numerical choices, the Subtopic Selection menu will appear again and the brackets following the subtopic numbers you choose will be vacant. That means you will not see messages stored in these subtopics when you return to the message board.

If the brackets are vacant and you want to turn the subtopics on again, type the number or numbers (separated by commas) at the Subtopic Selection prompt and press the Return key. The revised menu will reflect your choices by displaying the asterisks in the brackets.

But what about the N? If the asterisk appears in the bracket before the N, it means that any new public subtopics the forum administrator adds will automatically be added to the message subtopics you'll be able to see. If you choose N at the Subtopic Selection prompt, you'll be asked if you want new public subtopics to be added automatically. If you answer Y (for Yes), the asterisk will remain. If you answer N (for No), the asterisk in the brackets following the N will disappear and if the forum administrator adds new subtopics, you'll not see them.

When everything is the way you want it on the Subtopic Selection menu, just press the Return key at the menu prompt. You'll be asked if you want to make the changes temporary for this session only (S) or permanent (P) for all future sessions in the forum. After making that choice, you'll return to the Function menu or Function prompt.

Now you know why typing numbers at the Subtopic Selection prompt is similar to flipping a switch. Choosing a number one time turns the subtopic off and typing it again turns it on.

Once you have the selector set the way you want it, you'll only see the messages in the subtopics you have chosen. However, you'll still have access to all public data libraries. And, if someone sends a message to your User ID number but posts the message in a subtopic you have not chosen, you will still receive it.

You can change the makeup of your subtopic selection anytime simply by going to the Subtopic Selection menu and using the numbers like switches to turn subtopics on again.

The ability to select specific subtopics is only one of the many ways you can tailor a forum to meet your specific needs. To get information on how the other user options work, type HELP at the bottom of the User Options menu to see an online description of the other User Option menu selections. These features will help make your online time in the forums more efficient and pleasurable.

David Peyton co-authored How to Get the Most Out of CompuServe *and* Advanced CompuServe for IBM Power Users. *His CompuServe User ID number is 76703,244.*

Go Mall

A GUIDE TO COMPUSERVE'S ELECTRONIC MALL SEPTEMBER/OCTOBER 1987

Win a week in Paris—if Your Number's Up!
A *tour de force* grand prize from Air France.

Free connect rides from:
- Buick Motors
- Air France
- Apparel Concepts for Men
- AT&T
- NewsNet

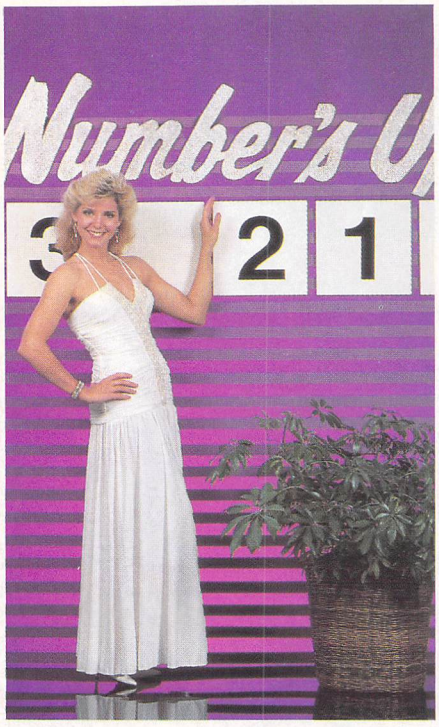
Welcome aboard:
Seven new merchants bring innovative gifts to The Mall floor ... from miniature collectibles to affordable gold.

Worthy excursions:
- Browse wares in print via our Catalog of Catalogs.
- Metropolitan Museum of Art offers reproductions.
- Pick three books for $3 from The Small Computer Book Club.

Who will unmask the Mystery Merchant?

THE ELECTRONIC MALL™

DEAR SHOPPER



We're a numbers society. If you're like me, you have a Social Security number, a bank card number, a calling card number, more credit card numbers than you'd care to remember and—my favorite—a CompuServe User ID number.

There's clout to that last number. It marks you as a member of an exclusive group. Occasionally, in my travels I'll meet fellow CompuServe subscribers and there's something almost kinetic about the connection. Rather than exchange telephone numbers, we'll swap User ID numbers, bemusing any who witness the exchange. It's like knowing a secret fraternity handshake or the password to a private club. It sets you apart and marks you as someone who's smart, savvy and tuned in to the future.

In more ways than one, this User ID number can be extremely profitable for you ... especially when it's "up." Back by popular demand this fall is Your Number's Up!, an Electronic Mall exclusive! This year, in addition to winning any of hundreds of prizes, your CompuServe User ID number could win you a deluxe trip for two to Paris, compliments of Air France! You'll find details about the contest and the prizes inside.

This issue also introduces seven new merchants. There's back-to-school merchandise, a calendar of events listing free shopping at select stores, news on software sales, new car lines and The Mall's Catalog of Catalogs, a listing of print materials you can order or request online.

Fall at The Mall promises lots of excitement! We hope you'll browse our new merchants, and visit your old favorites as well. Enjoy the season, and may your number be up!

Electronically yours,

Cindy Morgan

ELECTRONIC LETTERBOX

A caffeinated class act.
Dear Coffee Emporium:

My sixth grade class in Anaheim, Calif., is learning how to use a modem ... by communicating with electronic pen pals at a Maryland school.

I was showing them The Electronic Mall feature, and we decided to order some gourmet coffee. We even had a class vote to decide if I should use VISA or MasterCard to pay.

Oh yes—they did notice the Irish Cream and the Grand Marnier.

But I have veto power. Thanks.

Francine B.

A dandy Tandy delivery.
Dear Marymac Industries:

It's very convenient to check pricing and availability in your Mall store.

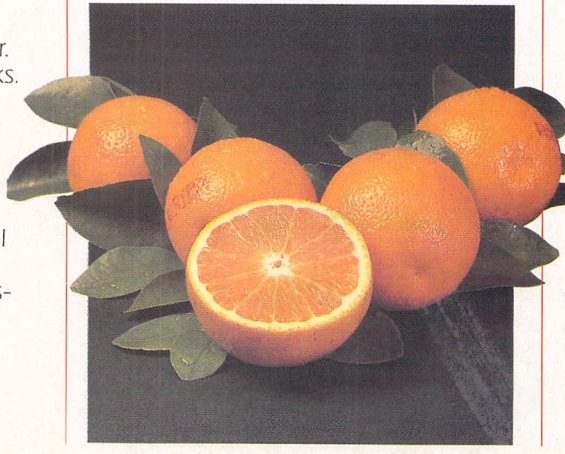
I ordered from you on a Tuesday and received the items on the following Monday. Excellent!

Terry O.

Fast fruit.
Dear Rick:

I've driven by a fruit/gift stand here in Sarasota for years, but never seem to have either the time to stop or friends' addresses with me. But when you can order from home—with your address book and credit cards handy—it's a great system. I'll be using it more, and I wish you all good luck.

Christopher B.



WANTED: NEW MALL MERCHANTS

Do you have a product or a service of interest to CompuServe subscribers? Consider opening a Mall store. Contact the sales office for details.

Kim Cheatham
The Electronic Mall
5000 Arlington Centre Blvd.
Columbus, OH 43220
614/457-8600

GO Mall

***GO MALL*, September/October 1987**
Volume 1 Number 4

GO MALL is published bimonthly by The Electronic Mall™, a service of the Advanced Media Group, CompuServe Incorporated. For more information, call 614/457-8600, or send an EasyPlex to 70007,1610. Editors: Cindy Morgan, Karli Kohrs, Mike Mooney, Kirk Donnan and Mary Mitchell.

See them off the lot...on The Mall—Buick unveils 1988 line in October.
Please direct your attention to the showroom floor, ladies and gentlemen, where Buick Magazine has lined up its sparkling selection of autos for 1988. Leading the lineup is the 1988 Regal, Buick's brand new mid-size entry.

To celebrate the unveiling, see what Buick has in store free Oct. 1 through 4. While there, request a full-color brochure featuring the complete lineup.

Discover the Buick difference. GO BU

In this corner: Product rebates from Black & Decker.
More than likely, that Black & Decker appliance you picked up last weekend will make you some money. Visit the B&D Powerline Network's online Rebate Corner for a list of all product rebates or special offers, along with their effective dates. Remember ... these rebates are in addition to the Powerline Network's low prices. GO BD

SDA's holiday early bird shopper program—incentives for early gift-getters.
Mush! Get on with your Christmas shopping from Oct. 1 through Oct. 31 at Software Discounters of America and save up to $10.

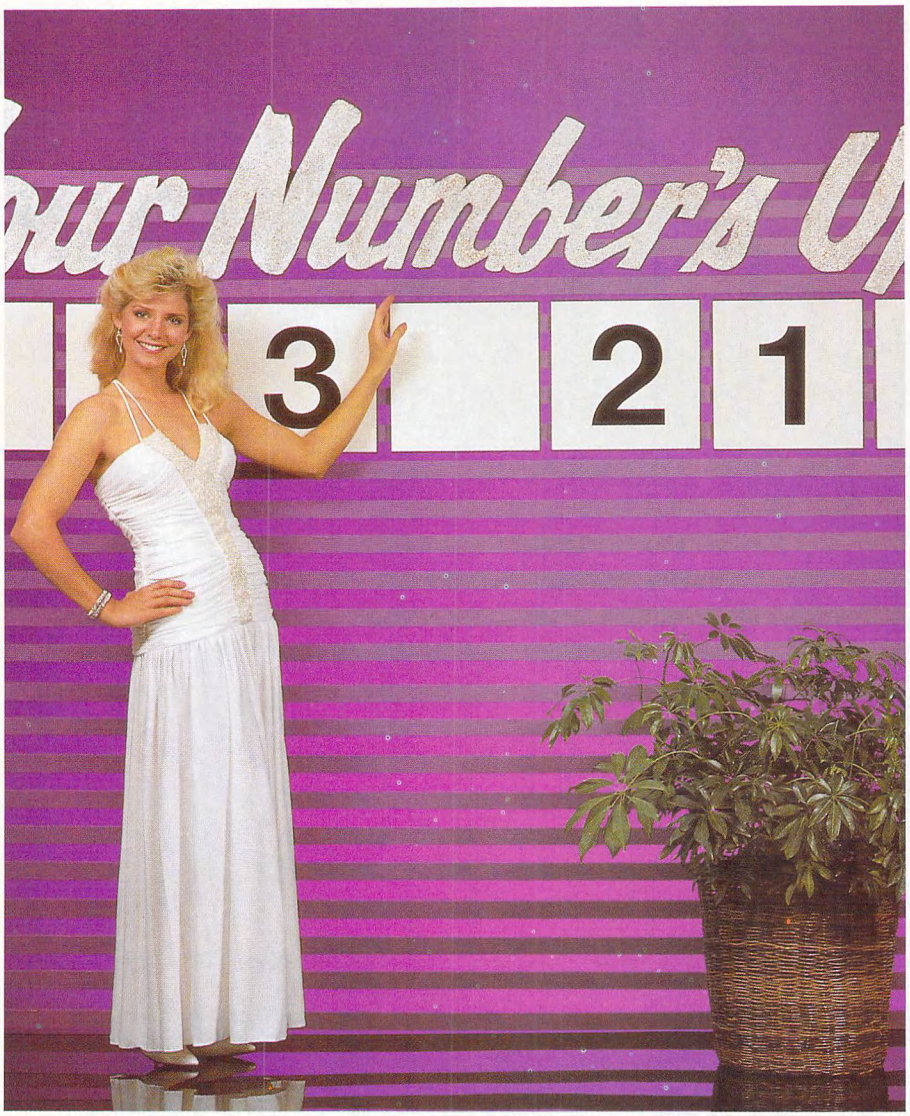
Tempt traditional gameplayers with electronic versions of backgammon and chess. Treat progressive ones to electronic adventure games and sports simulations. Browse hundreds of other gift possibilities, including financial programs, word processing packages, and software selections for young personal computing enthusiasts. GO SDA

Stop by Software Discounters' September Sidewalk Sale.
In celebration of two years on The Mall, Software Discounters is holding another of its now-famous sidewalk sales. Already known for its low, low prices, SDA has gone as low as it can go on a special selection of software for most computers. During September, access the sale through SDA's top menu ... and find unbelievable values on over 100 titles—from as low as $1.99. GO SDA

Holiday Bazaar '87 opens October 21.
Mark your calendars now! Holiday Bazaar '87, The Mall's festive holiday celebration, opens Oct. 21. To get you in the holiday spirit, there will be no connect charges at The Mall on opening day.

Browse The Mall's Gift Giving Guide, featuring hundreds of great gift ideas—truly something for everyone! Sample the online recipes. Talk to Santa and let him know if you've been naughty or nice. Remember, there are *only* 1,536 shopping hours till Christmas! GO HOL starting Oct. 21.

Note: Please remember that for Mall promotions that include free connect time, all applicable communications surcharges remain in effect.



There's no escaping it ...

Your Number's Up!

Your Number's Up! isn't just an electronic game show ... it's your chance to be able to say, for the last time, "I've never won anything in my life!"

Paris is calling.
This fall, one CompuServe subscriber and a significant other will jet to Paris, compliments of Mall merchant Air France. GO AF

As a grand prize winner of Your Number's Up!, you and your guest receive roundtrip air transportation from New York to Paris, plus six nights at a superior tourist hotel.

Prizes, prizes, prizes.
Every week for six weeks, each of 25 fortunate subscribers will have his or her pick of prizes from The Electronic Prize Showcase ... and all will become eligible for the fling in France.

But in addition to the Parisian getaway, you could win one of hundreds of other prizes—including anything from a compact disc, courtesy of Express Music, to a tropical luau from Florida Fruit Shippers.

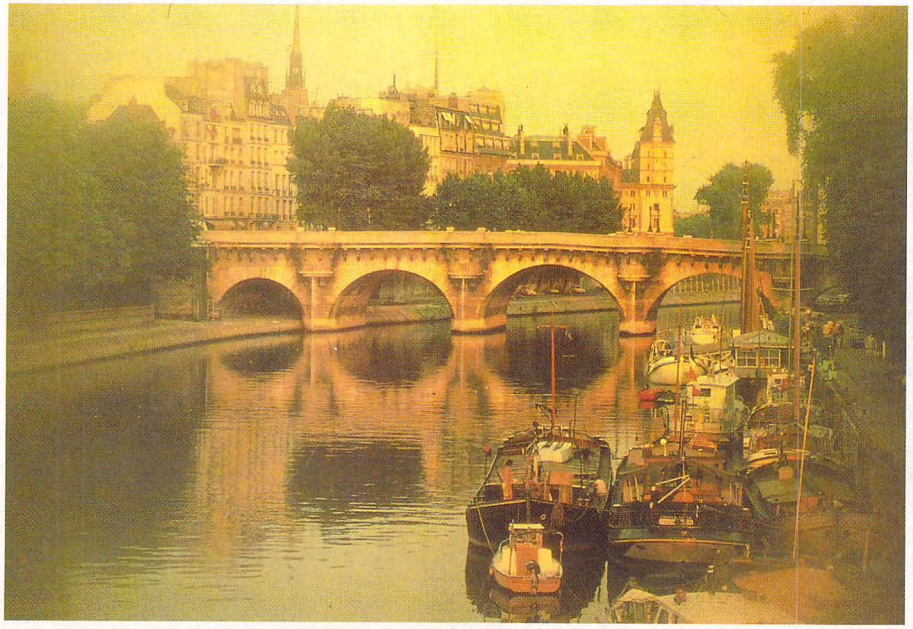
Easy entry.
Shoppers, it's a cinch.

Beginning Sept. 8, simply complete the official electronic entry form that includes name, address and favorite Mall merchant. No purchase necessary. Simply GO YNU.

Only one entry per valid User ID number is permitted each week ... but you can enter every week of the contest—six chances in all.

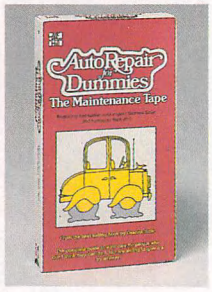
Twenty-five winners will be selected each week at random from all valid entries. Winning CompuServe User ID numbers will be posted electronically every Monday. If your number is up, you're a winner, and are invited to pick a prize from The Electronic Prize Showcase. Prizes are awarded on a first-come, first-serve basis.

Here's more good news: All weekly winners become eligible for the Paris grand prize, drawn at random and announced online Oct. 20.



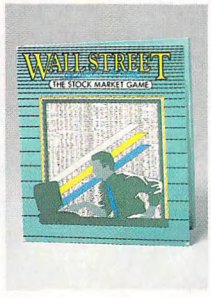
You can't win if you don't play. For complete rules and your chance to experience fabulous France, GO YNU, after Sept. 8. The prizes include:

- Korg KMX62 6 in/2 out mixer from Music Alley Online
- Gucci spray perfume from Inside * Outside
- Nexxus shampoo and conditioner combo from B&K Beauty Supplies
- Self-inking return address stamp from Executive Stamper
- Baldwin solid brass James River lamp from J.E. Smith Brassware
- Radio control car from Hobby Center Toys
- *Point of Attack: The Defense Strikes Back,* from McGraw-Hill Book Co.
- *Auto Repair for Dummies* video from McGraw-Hill Book Co.

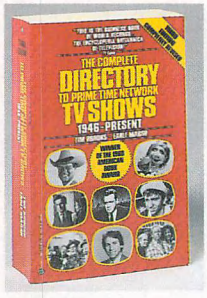


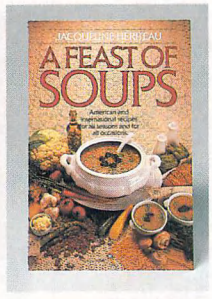
- *CompuServe Product Almanac* from The CompuServe Store
- Silk flower arrangements in salmon, mauve or earthtone colors from Walter Knoll Florist
- Fish 'N' Drinken Stein and Massagemales wooden back rubbers from Walter Knoll Florist
- $50 merchandise gift certificates from Apparel Concepts for Men
- $25 Be My Guest® restaurant certificates from American Express
- Auto care kit from Black & Decker Powerline Network
- Sunshine orange rum cake from Florida Fruit Shippers

- Tropical Luau from Florida Fruit Shippers
- Pick of the Grove gift pack from Florida Fruit Shippers
- 1 lb. Jamaican Blue Mountain Coffee from Coffee Emporium
- *Coffee: A Connoisseur's View of Coffee* from Coffee Emporium
- Computer coffee mugs, including "Terminal Madness" and "You Turn my Software to Hardware" from Coffee Emporium
- Bialetti 3-cup Espresso maker from Coffee Emporium

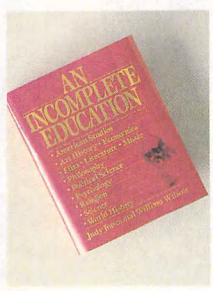


- A day online at NewsNet from NewsNet
- *OST: Options Tutorial Program* from Investment Software
- *Wall Street: The Stock Market Game* from Investment Software





- 100 percent cotton ruffled teddy by Seven Vails from Inside * Outside
- *The Complete Dictionary to Prime Time TV Shows; A Feast of Soups; An Incomplete Education* and *Witness to a Century* from Ballantine Books
- Square-inch land deed, Hawaiian logo cap, Coconut Willie's Sunning Lotion and Maui Specialty Potato Chips from Hawaiian Isle
- "Relish To You" gift basket from Simon David
- *Whitney,* the new Whitney Houston CD and *In The Dark,* the latest Grateful Dead CD from Express Music
- A 3-tape VHS storage box from Magic Castle Video
- A selection of laserdiscs, including *The JazzLife: Mike Maineri; The Joy of Stocks: The Forbes Guide to the Stock Market;* and *A Golden Decade of College Football: 1970–1980.* All from Magic Castle Video.
- Monet note card gift collection from The Metropolitan Museum of Art

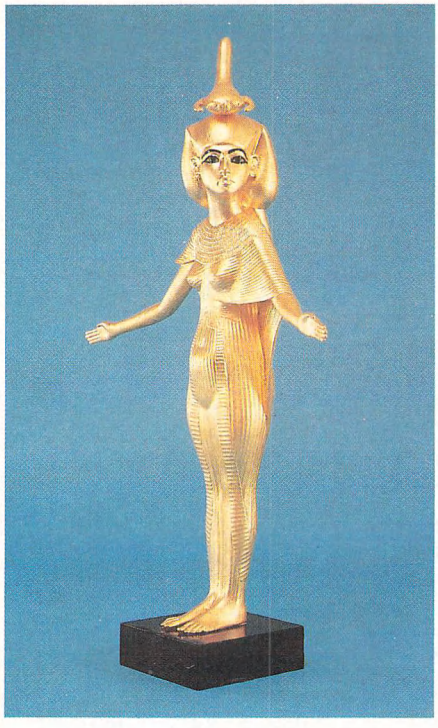


And of course the trip for two to Paris from Air France.

AIR FRANCE

The Met...by modem.

In 1921 The Metropolitan Museum of Art issued its first catalog. Now, in 1987, the museum is proud to announce its first electronic catalog.



With the opening of The Metropolitan Museum of Art's Mall store, an array of museum reproductions, publications and gifts is available for electronic review and acquisition.

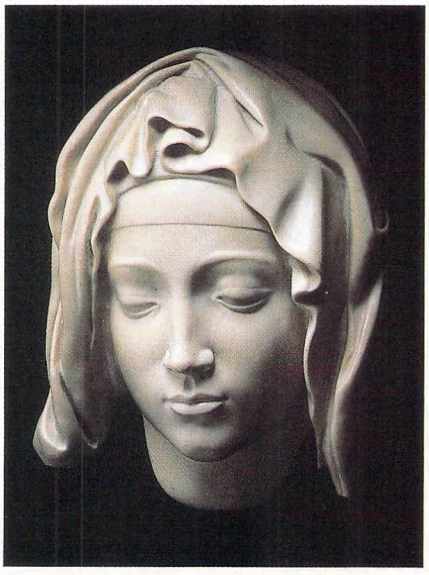
With few exceptions, the objects offered are produced exclusively by the museum, under its direct and careful supervision.

Showcased online are an exquisite reproduction of Selket, one of the four goddesses guarding the canopic shrine of the Egyptian king Tutankhamen; a sterling silver reproduction of an 18th century French sauceboat; a reproduction of an Egyptian princess' necklace; a luxurious wool challis butterfly shawl; and an 18th-century English handwarmer.

To kindle the holiday spirit, greeting cards, songbooks, advent calendars and tree ornaments compose just part of the museum's Christmas collection.

Of special interest is the museum's plaque reproduction of the Head of the Virgin from Michelangelo's Pieta. Each plaque contains approximately 65 ounces of refined Carrara marble.

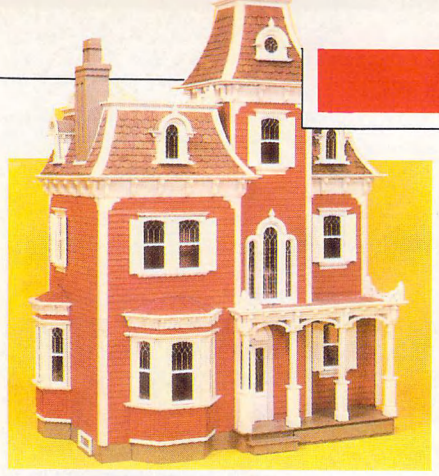
Work by artists as diverse as Eliot Porter, Georgia O'Keeffe, and Vincent van Gogh bring style to date and address books, illustrated calendars, and note cards.



An unusual selection of gift books, such as *Metropolitan Cats, The Illustrated Gospels and Book of Psalms*, and *Talking to the Sun*, an illustrated anthology of poems for young people also awaits the discerning online shopper.

Order the Museum's full-color, 132-page 1987 Christmas catalog featuring more than 500 items, reproduced from works of art in the museum's collections and ranging in price from less than $5 to more than $1,000. All items displayed in the print catalog can be ordered online, using the electronic order form.

Page through the Metropolitan Museum of Art's first electronic museum shop. Here, from ancient Egyptian reproductions to art nouveau glassworks, you'll discover an aesthetically unparalleled gift selection, compiled exclusively from work displayed within The Metropolitan Museum of Art. GO MMA



It's a small world.

Hobbyists, serious collectors of miniatures and novice dollhouse builders take heart ... Don's Dollhouse and Miniatures has opened its doors in The Electronic Mall.

Premier dollhouse manufacturers such as Greenleaf, Walmer, and Hofco showcase their structures online. Colonial farmhouses, Victorian townhouses, a Southern dynasty home—whatever your penchant, Don's can put a roof over your head.

For example, two amenities that characterize The Beacon—a seven-room gingerbread Victorian house from Greenleaf—are a winding staircase and French doors.

Created from cabinet-grade mahogany plywood, each structure bespeaks the quality a serious collector would demand ... and each is built to scale ... 1/12th actual size.

Fully illustrated instructions and prestamped or precut parts with every dollhouse make assembly both intriguing and hassle-free.

For build-it-yourself buffs, Don's Dollhouse and Miniatures' online catalog supports all building media: brick, stone, and tile; doors and windows; roofing and siding materials; even electrification packages.

Choose from nearly 100 pieces of Renaissance furniture ... China cabinets, roll-top desks, marble-topped dressers, rockers, mirrors, beds, tables and many more.

For those who like to think small on the "collector" scale, *The Miniatures Catalog, Ninth Edition*, is a must. For only $15.95, you'll receive 364 pages of big ideas for scale living. Items in the catalog can be ordered using the order blank provided online.

So, for that initial piece of a little girl's dream dollhouse, stop in at Don's Dollhouse and Miniatures. GO DD

Affordable heirlooms, giftware and accessories.

New merchant J.E. Smith Brassware offers subcribers a wide selection of giftware and decorative accessories, including Baldwin brassware.

Baldwin takes pride in presenting a growing, exclusive collection of brass accessories reproduced from America's finest museum originals.

With more than 37 years of experience, Baldwin has established itself as the leader in creating brass accessories for the home. Unmatched for design style, quality, detail, weight and flawless finish, Baldwin brass enhances any decor.

Among the items showcased in Baldwin's online catalog are an elegant petal-based Queen Anne candlestick from the rich resources of historic Deerfield, Mass.; brass trivets from historic Savannah, Ga. and the Shelburne Museum; and many other historical pieces that bear the seal of the American Museum Brass Collection.

Gifts suitable for every occasion can be found online. Choose from candelabras, chambersticks and hurricane lamps; Revere bowls, serving trays, salvers, or wine coasters; executive desk accessories; or brass bath accessories.

Browse J.E. Smith's online catalog, or order copies of the detailed full-color print brochures. GO JE

Gifts of gold.

Welcome The Gold Connection to The Mall. A dealer in precious metals, coins, gemstones, and custom goldsmithing, The Gold Connection offers shoppers gifts at affordable prices. Browse the Showcase Shopping Section for a selection of gold necklaces and bracelets in styles for men and women, and other gift items including sterling silver necklaces, pearls and watches.

All gold items available online are genuine 14 kt., of either Italian or domestic manufacture. Among the featured necklace designs are Italian herringbone, Florentined herringbone and diamond cut rope. Each is available in a variety of lengths and widths. Custom goldsmithing is also available upon request.

A glimmering gift suggestion is the Add-A-Bead starter set. Best of all, The Gold Connection's online price for the set bead is only $35.

Coin jewelry, each piece featuring a new uncirculated American eagle U.S. gold coin, also makes a wonderful gift. Engraved bangle bracelets, sterling chains, pearl necklaces, and his and her 14 kt. Seiko watches round out The Gold Connection's online catalog.

To browse The Gold Connection's new Mall store, GO GD.

A banner idea.

It's a close friend's 40th birthday, you say? Imagine his chagrin when a six-foot "It's-all-downhill-from-here, Ted" banner graces his driveway.

Know a business associate who's being promoted? Send your congratulations (or whatever) in a big way.

New Mall merchant BannerGram specializes in banner greetings for banner occasions. Choose a standard message or create a custom phrase of up to 48 characters. Commemorate any occasion, from bar mitzvahs to retirements.

A banner's not quite enough? BannerGram offers a unique gift selection to complement any oversized statement. Select from Tutankhamen's Treasures, La MiMi's Lingerie, leather goods, challenging kids' toys and more.

Remember ... next important message, go larger than life. Say it with a banner from BannerGram. GO BG

GRAND OPENINGS

All dolled up.

A mutual fascination with doll collecting prompted Mary Lou Smith and Ann Parsons to opt for early retirement in 1984 and set up shop. The result: The Doll Place, on the San Francisco Peninsula. Now online, through The Electronic Mall.

During the period they've been in business, the partners have watched doll collecting—as an investment and a hobby—surpass stamp and coin collecting to become the leading subject of collectors nationwide.

The Doll Place displays more than 30 lines of dolls ranging in price from $13 to $2,900. Standing shoulder-to-shoulder on shelf upon shelf are porcelain dolls, replicas of Hummel figurines, Madame Alexander dolls, Karin Heller dolls, Storybook dolls and limited edition clown and harlequin masks, among others.

Whether collecting for investment purposes, or searching for a doll to replace that "best-friend" when you were small, you may find that The Doll Place is home to an old friend. GO DO

Stationery merchant now travels the network nation.

If the name of your company happens to be your last name, if you're the proprietor of a small business, or if you work out of your home, you owe it to yourself to discover The Stationery Center.

Offering a full line of office supplies, this new merchant lines its shelves with everything from paper clips to copiers...all at very competitive prices. Just a few of the products offered: Binders, filing supplies, computer paper, printers, and paper shredders.

Walk down to The Bargain Basement for top-quality merchandise at discounted prices. A surge protector, computer table, and diskette case are a few of the super bargains awaiting you.

Also showcased online is a selection of gift merchandise, including Cross pen-and-pencil sets and a leather Stebco attaché case.

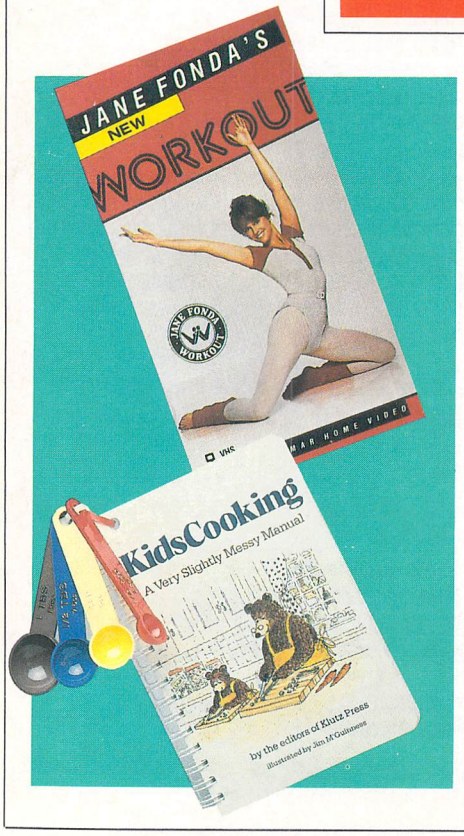
To further help you take care of business, a number of free specialty catalogs are available online.

Or order the *Wish Book Office Products Catalog*. Its 800 pages include more than 25,000 items designed to make your office work easier and more productive. The *Wish Book* costs only $10, and includes a rebate certificate good for $10 off any purchase of $30 or more.

Best of all, anything in it can be ordered quickly and conveniently through the online order blank.

Get your office going...without going outside your office. GO SC

SPOTLIGHT



Educational diversions for the younger set. From Waldenbooks.

Waldenkids World—an all-new section of Waldenbooks especially for kids—is your passport to the world's most innovative and creative toys, games and books. Battat® developmental toys from Canada. Galt® art supplies from England. Tasco® science kits from Japan. All are offered in the online catalog.

Expose youngsters to astronomy with The Star Machine, a home planetarium or the Tasco® Telescope.

Intrigue them with prehistoric pets, including a rhammphoryncus, a brontosaurus and a triceratops (stuffed, of course).

Or introduce them to Petri dish life forms with the Tasco® Zoom Microscope.

Modern-day children's classics on Waldenkids' Mall shelves include *Goodnight Moon, The Story of Babar,* and Maurice Sendak's *Where the Wild Things Are.*

A/V offerings complement hardcover selections.

Waldenbooks is also your one-stop online shop for books, audio and video cassettes.

Relax this weekend with the latest bestsellers, science fiction classics and business and consumer books.

Or pop in a Waldenbooks audio or video cassette and increase your knowledge of old movie trivia, absorb a new language, or shape up with Jane.

Waldenbooks is one of the country's largest bookselling chains, with more than 1,000 stores nationwide. The one nearest you is in The Electronic Mall. GO WB

Incentives for excellence.

Kick off your next business gathering on a key note with Lincoln Manor Baskets' just-introduced corporate gift service.

With a little direction from you, Lincoln Manor will design and deliver customized gifts for presentation to stand-outs in your organization.

Commemorate the anniversary of your organization with a basketful of momentos for each of your key clients.

Reward your sales staff for sailing past quota. Welcome meeting attendees with a customized gesture.

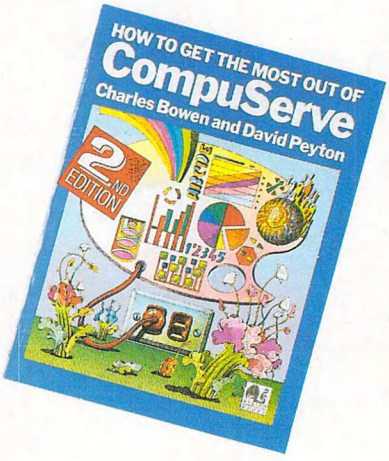
For the best in all-occasion gift baskets, GO LM.

For CompuServe subscribers only: Three books for $3. From The Small Computer Book Club.

The Small Computer Book Club invites Mall shoppers to choose any three from among its selected titles—a value up to $75—for $1 each.

Choose from more than 25 books on all areas of microcomputing. Including books on the IBM PC, Apple II, Commodore, and the Macintosh. Books on interfacing and troubleshooting, programming, and common business software such as dBase III and Lotus 1-2-3. And books on general microcomputer applications such as desktop publishing, online communications, and computer animation.

As an added bonus, you'll receive *How to Get the Most Out of CompuServe* (including a $6 usage credit) absolutely free. This $16.95 value lets you in on hundreds of proven CompuServe tips, techniques and short cuts. For details, GO BK.



DEAN WITTER
INVESTOR'S CHECKLIST
DEAN WITTER VARIABLE ANNUITY
Let us help you meet your retirement goals.
Dean Witter's Family of Funds
Let us help you meet your investment goals.
Dean Witter's Family of Funds

Take Stock: Dean Witter Reynolds' stock picks out perform the average.

Dean Witter is the only major firm that publicly audits its stock recommendations so that you can actually see how these choice stocks perform compared to the leading averages. Since 1978, Dean Witter's recommended list of stocks has consistently outperformed the averages.

If you're a market player, or are just intrigued by the prospect, visit Dean Witter's Mall branch and ask for a complimentary copy of the recommended list.

Investment questions? Dean Witter welcomes all queries through its Open Line. For stock information or a copy of *Stock Picks*, GO DWR.

Accept no substitutes: This Oktoberfest tour from Ameropa Travel is Munich-bound.

Round trip airfare to Frankfurt. Two nights of first-class accommodations in Germany. Lunch, beer and entertainment at Western Europe's biggest party in Munich. Four nights to wind down at a four-star hotel in the lovely Austrian villages of Berwang or Seefeld—with continental breakfast and dinner included.

Ameropa Travel's package includes departures from New York, Boston, Philadelphia, Baltimore/Washington, Detroit, Atlanta, Dallas-Ft. Worth, Chicago, Minneapolis-St. Paul, St. Louis, Miami and Los Angeles.

Where would you like us to send your free brochure? Your detailed itinerary? Your tickets? Tell us online.

To book your German holiday, or to review other European airfare bargains, visit Ameropa Travel, *mach schnell!* GO AT

Protect your most intelligent investment—with computer insurance.

Safeware, a pioneer resource for computer insurance, acts as your own security force by assuring you full replacement coverage of hardware, media and purchased software. As little as $39 a year protects you from the financial pitfalls of fire, theft, power surges, earthquakes, water damage and auto accidents. Makes a world of sense, don't you think? GO SAF

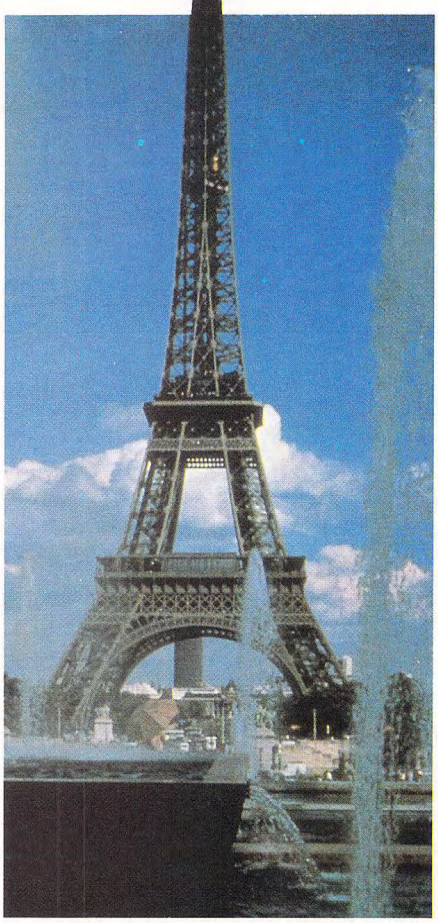
Top off your next European vacation with a bonus *soiree* in Paris.

Take a tour of Italy or Israel; Moscow or Leningrad; or Vienna, Budapest, or Prague; then top it off with two or three deluxe nights in the City of Light. Air France, in conjunction with Vacations' Paris Plus will customize a travel package so you can do just that ... at affordable rates.

Your transcontinental Air France flight includes complimentary champagne meals and in-flight entertainment. Included in your destination package are transfer transportation, hotels, most meals and sightseeing tours—as well as ample time to strike out on your own.

And your stay in Paris—at no additional cost to you—includes accommodations at the Deluxe Concorde Lafayette Hotel, airport transfers, and discount coupons for shopping and entertainment ventures.

For more information on these vacation packages, or to request a brochure with detailed itineraries of all destinations, GO AF.



For four days this fall—visit NewsNet free of connect charges.

NewsNet links you to the world's largest database of business newsletters—more than 300—and wire services—10, including the Associated Press, United Press International and *Reuters*.

InfoWorld said it best: "NewsNet's ability to provide almost immediate, specific news makes it a good buy for people whose livelihood depends on being well-informed."

Receive and monitor customized news on more than 30 different industries and professions via your personal computer.

Read entire articles. Scan headlines. Electronically save clippings for later referral. The choice is yours.

As an introduction to this unique service, NewsNet is hosting a series of open houses at The Mall. For five days this fall, NewsNet will waive connect fees: Sept. 4, 11 and 12; and Oct. 20. (Telecommunications surcharges remain in effect.)

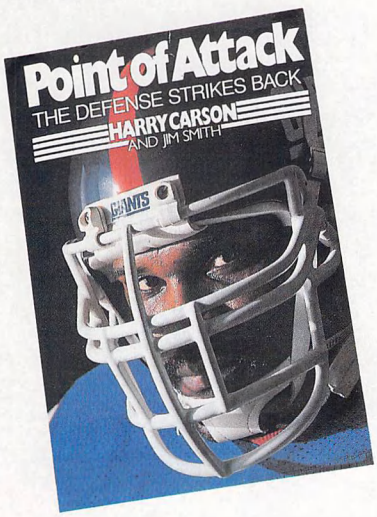
So take this chance to learn about the service. Review the industries covered and scan the publications and wires monitored. Then sign up online. GO NN

EXTRA POINTERS

Go Mall's guide to grabbing the most from this football season.

Available for the Commodore 64, Apple, IBM, Atari ST, and Amiga, **GFL Championship Football** rewards calculating offensive and defensive instincts. From Software Discounters of America. GO SDA

Point of Attack: The Defense Strikes Back. This McGraw-Hill Bookstore selection has been updated with replay photos of the 1986 championship season and the New York Giants' Super Bowl victory ... only $4.95. GO MH



Planning a pilgrimage to the alma mater for The Big One? Consider leasing a **Jeep Grande Wagoneer** or **Plymouth Voyager** from AutoVision to host your own tailgate party. GO AV

Once there, appease gridiron wannabe's with **The Tailgater's Basket**, a selection of gourmet grub. From Lincoln Manor Baskets. GO LM

Snuggle up at the game with a good friend: An **Allen Paine Sweater** of 100% lambswool, available in eight rich colors. Men's sizes S, M, L, and XL. From Apparel Concepts for Men. GO APC

Football Fan's Snack Pack. Between partisan roars, munch on beer nuts, cheese popcorn, Cajun sticks, macadamia nuts and Georges Hunter mix from Simon David. Hold that roar, there's more—it arrives in an attractive wicker basket. GO SIM

ACADEMIC ACCESSORIES

Gift ideas for students of all ages—K through gray.

Check spelling, diversify syntax and enrich your vocabulary with the **Ballantine Reference Library Boxed Set**. This multi-purpose package includes *The Random House Dictionary, The Random House Dictionary of Synonyms and Antonyms, The Word-a-Day Vocabulary Builder* and *1,000 Most Important Words*. Only $10.45. From Ballantine Books. GO BAL

The AT&T **"Call Me" Card** allows your away-from-home student to charge calls to only one long-distance phone number. Yours. GO ATT

Though you'll still supply the necessary insight, **Term Paper Writer** makes preparing your papers a breeze. From note-taking and outlining to footnoting and bibliographies, these academic tools organize the writing process and simplify compliance with Turabian, APA, or MLA style guidelines. Available for the Tandy 1000, 1200 and 3000 from Marymac Industries. GO MM

Spinnaker's **Homework Helper** is a welcome catalyst when budding writers and mathematicians stall at a blank sheet. For Apple IIe, IIc and IBM. From Computer Express. GO CE

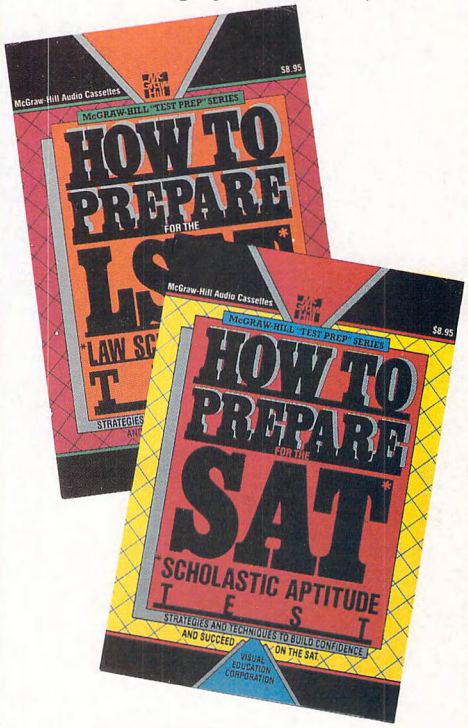
Just say "no" to artificial sleep suppressants during collegiate all-nighters. Stay alert in style—and good taste—with a **One-Cup Coffee Maker** and **Sampler of Gourmet Coffees** from Coffee Emporium. GO COF

When the midnight munchies threaten the muse, take adequate protective measures with **Jelly Bellys**, an exotic twist to the traditional jelly bean. The menu of 20 flavors includes Pina Colada, Ice Blue Mint and Watermelon. From Simon David. GO SIM

Or deploy **Kitchen-Cooked Maui Potato Chips**—where distinct flavor and texture are the product of a well-guarded family recipe from Hawaiian Isle. GO HI

Build a competitive edge on test-taking with **The McGraw-Hill "Test Prep" Series of Audio Confidence Builders**. This innovative series of audio cassettes trains students to be smarter test takers while building confidence for standardized tests, such as the SAT and the LSAT. From McGraw-Hill Bookstore. GO MH

Make informed decisions on higher education with **The Perfect College** by Mindscape. Supports keyword searching by academic options

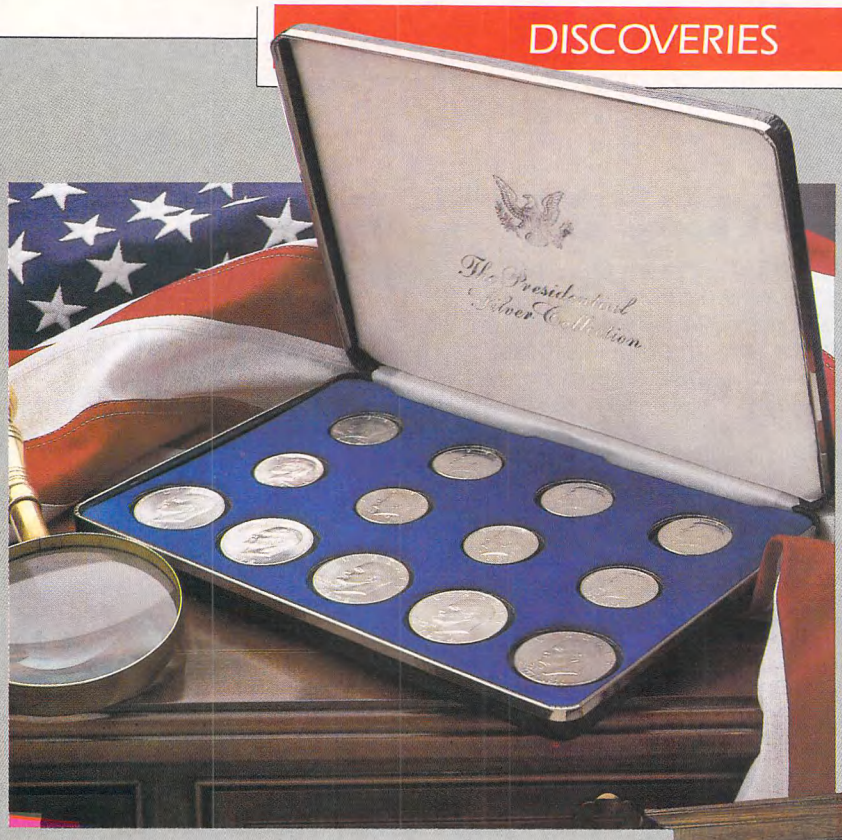


(admission requirements, tuitions, student life, etc.) for 1,700 four-year colleges and a variety of junior and community colleges. IBM-compatible. From Software Discounters of America. GO SDA

Listen to lessons from a street-smart executive and learn with the audio tape version of ***What They Don't Teach You at Harvard Business School***. From Waldenbooks. GO WB

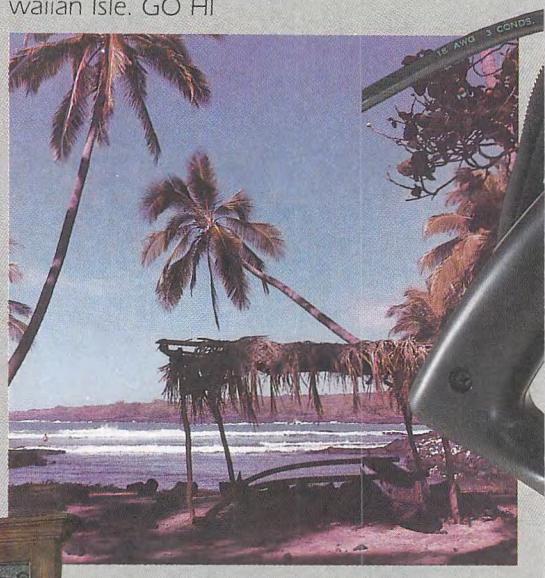
Thank a teacher for a job well done with **An Apple a Day**—18 assorted varieties of apples. From Simon David. GO SIM

When the kids leave the nest, let them know you miss them by sending **The College Survival Basket.** Includes gourmet goodies, address book, note cards, and *The On-Campus Cookbook*. From Lincoln Manor Baskets. GO LM



A Presidential collection of silver.
A handsome presentation of the last 13 silver US coins minted for circulation. From American Express. GO AXM

A square-inch piece of paradise.
Own land in the exotic, tropical Hawaiian Ocean View Estates on the Orchid Isle. Complete with deed and registration form—but don't plan any extended vacations. From Hawaiian Isle. GO HI



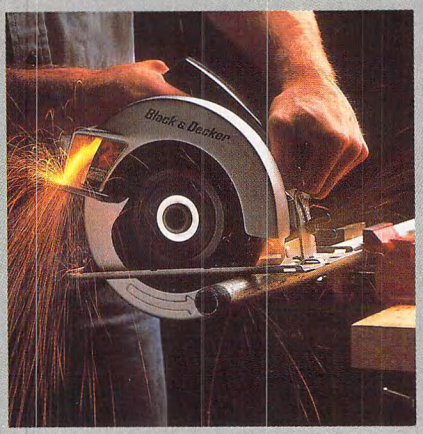
Elegant eating.
Entertain with élan when you acquire this 91-piece bronze and rosewood flatware collection housed in a teak storage chest. Complete, it's less than $200, from American Express. GO AXM

Grandparents' Day: Sept. 13.
Send some sunshine across the street or across the country with the FTD Sweet Memories Bouquet ... only $25. From Walter Knoll Florist. GO WK

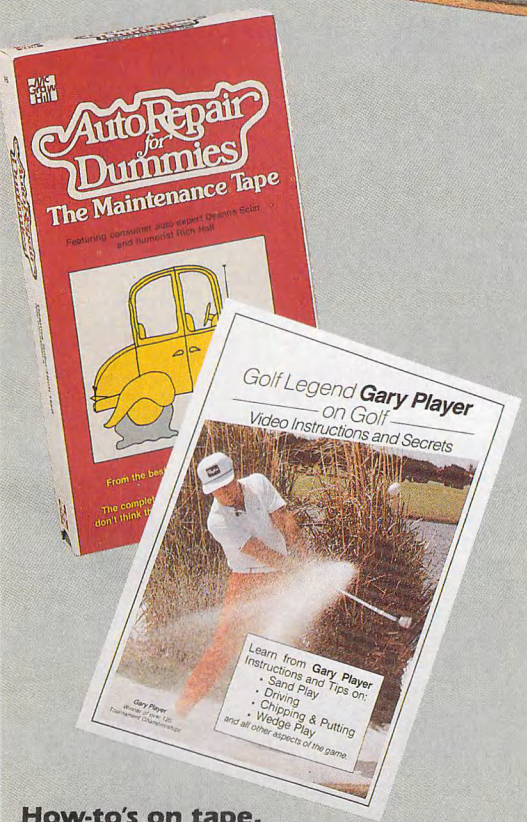
Hang your hat. In style.
This solid oak hall tree is a home accent that's both charming and practical. From American Express. GO AXM

DISCOVERIES

A sander that sweeps.
This powerful 3/4 HP belt sander knows how to clean up after itself... it's a Black & Decker Powerline Network product that vacuums its own dust as it sands. GO BD



Cuts wood, metal, masonry.
Black & Decker's heavy-duty circular saw is 7¼" of heavy gauge steel with ball bearings throughout. From B&D Powerline Network. GO BD


Auto Repair for Dummies
The Maintenance Tape
Golf Legend Gary Player on Golf
Video Instructions and Secrets
Learn from Gary Player Instructions and Tips on:
• Sand Play
• Driving
• Chipping & Putting
• Wedge Play
and all other aspects of the game.

How-to's on tape.
Learn to correct your putting stance from *Gary Player on Golf*, how to check your oil from *Auto Repair for Dummies*, and all about that sinfully delicious vice, *Chocolate*. From McGraw-Hill Bookstore. GO MH

EDITORS' CHOICE

Smell of success.
Keep yourself scented and supple with fragrances and body creams from Arpege, Gucci, Pavlova and Silence. Brought to you by Inside * Outside. GO IO

Ham it up.
From HeathKit's expanding amateur radio line comes the new Heathkit HK-232 Pack-Kit™ Multi-Mode TNC Kit—a versatile, hard-working addition. GO HTH

Interface the music.
MIDI software links your computer to a musical instrument for sounds with a high-tech twist. From Music Alley Online. GO MAO

Install a passive security curtain.
A fully-integrated security system, the SS-5810 from Heath Zenith guards homes and offices using passive infrared technology to detect heat and motion. From Heathkit. GO HTH

Know how *not* to write it.
The Dictionary of Cliches from Ballantine Books. More than 2,000 entries—only $3.95. GO BAL

A stylish drop-dodger.
This Burberry raincoat from Apparel Concepts for Men is the ultimate protection from the elements. GO APC

Resurrecting The Dead.
Attention Deadheads! *In the Dark*, The Grateful Dead's new album, is now available in CD or LP formats. From Express Music. GO EMC

Just in time for Oktoberfest.
"The Brew House" is the first in a new series of steins by Anheuser-Busch. With exacting detail, the stein depicts the famous Budweiser Clydesdale eight-horse hitch high-stepping through wrought-iron gates guarded by American bald eagles—symbols of Anheuser-Busch, Inc. From Walter Knoll Florist. GO WK

Railroading memories.
Remember when you were conductor of your own tabletop railroad? Dig your musty cap out of the attic and live your memories with model railroad sets from Bachman, LGB and Marklin. From Hobby Center Toys. GO HC

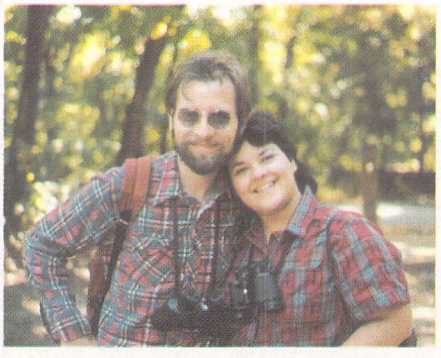
CATALOG OF CATALOGS

A number of Electronic Mall merchants allow shoppers to order a copy of their print catalogs/brochures. Several also offer an electronic form, which shoppers can use to order items directly from the merchant online, instead of filling out and mailing the printed order form. Be sure to watch for updated issues of this Index in future issues of *Go Mall* to make your online shopping easier and more enjoyable.

Merchant	Cost	Ordering
Aaxion Tech Network	FREE	GO ATN
Air France	FREE	GO AF
Alaska Teleshopper*	$3.50	GO AK
American Express	FREE	GO AXM
Ameropa Travel	FREE	GO AT
Apparel Concepts For Men	FREE	GO APC
AT&T	FREE	GO ATT
Black & Decker*	$2.00†	GO BD
Buick Magazine	FREE	GO BU
CDA World of Computers*	FREE	GO WOC
Chevy Showroom	FREE	GO CHV
Coffee Emporium	FREE	GO COF
Computer Express*	$2.00†	GO CE
Crutchfield	FREE	GO CFD
Dean Witter Reynolds	FREE	GO DWR
Don's Dollhouse & Miniatures*	$15.95	GO DD
E.F. Hutton	FREE	GO EF
Express Music*	$6.00	GO EMC
Florida Fruit Shippers	FREE	GO FFS
Ford Motor Co.	FREE	GO FMC
Garden Camera & Electronics*	$5.00	GO GC
Heathkit: Electronic Kit	FREE	GO HTH
Heathkit: Educational	FREE	GO HTH
Inside * Outside*	FREE	GO IO
Investment Software	FREE	GO IF
J.E. Smith Brassware	$1.00	GO JE
Menu International	Various	GO MMU
Metropolitan Museum of Art*	$1.00	GO MMA
Milkins Jewelers	FREE	GO MJ
Nitro Micro	FREE	GO NIT
Office Machines & Supplies*	FREE	GO OM
Official Airlines Guides, Inc	FREE	GO OA
Rin Robyn Pool 'N Patio	FREE	GO RR
Safeware	FREE	GO SAF
Simon David	$1.50	GO SIM
Stationery Center	Various†	GO FC
TSR Hobby Shop*	FREE	GO TSR
Walter Knoll: Maruri		
American Eagle Gallery	$3.50†	GO WK
Duncan Royale		
History of Santa Claus	$3.50†	GO WK

* denotes electronic order form available for use with print catalog
† denotes cost credited toward purchase

WINNERS CIRCLE



Alaska Teleshopper awards Alaskan vacation package to Chicago couple.

Just another online contest? Tell that to Julie Mueller and her husband, winners of the Alaska Teleshopper Summer Solstice Sweepstakes Grand Prize—a deluxe vacation package to America's northernmost state.

Heard the expression, "It couldn't have happened to a nicer couple"? Upon the announcement, Julie wrote to Alaska Teleshopper:

"Thanks so much! I've never won anything in my life. I have a special affinity for Alaska because that is where I met my husband. We met on the state ferry from Seattle to Juneau. I was on my way over to hike the Chilkoot Trail and he was going to Glacier Bay. The rest is history! Thanks again."

Bon voyage, Muellers. Join them in spirit amid the Alaskan wares of the Alaska Teleshopper. GO AK

FUN & GAMES

Mystery merchant contest.

Solve the following riddle and you'll spell out the name of an Electronic Mall merchant. The first 10 subscribers to solve the riddle will be rewarded with a $12.50 usage credit. To enter your solution, access *Go Mall* Online (GO GMO) and select Fun & Games. Good luck!

"My first letter is 100 times my third. Sandwiched in between is the beginning of anything. My third also marks the spot. My fourth is who it's all up to. My fifth is for the way you look at me. My last is the beginning and the end of evermore.

"To sum it up, I'm not mad or smart or blue, but I might make you a million, or bring to mind Christmastime.

"Who am I?"

MALL DIRECTORY

APPAREL/ACCESSORIES

APC Apparel Concepts for Men
GD The Gold Connection
IO Inside * Outside
MJ Milkins Jewelers

AUTO

AV AutoVision
BU Buick Magazine
CHV Chevy Showroom
DU Dutchess CompuLease
FMC Ford Motor Co.

BOOKS/PERIODICALS

BAL Ballantine Books
DJ Dow Jones & Co.
MH The McGraw-Hill Book Co.
MER Mercury House
BK Small Computer Book Club
WB Waldenbooks

COMPUTING

ATN Aaxion Tech Network
CD Computer Discount Warehouse
CE Computer Express
GL Great Lakes Business Forms
HTH The Heath Co.
IBM IBM Canada Ltd.
IR Icon Review
IS Investment Software
MM Marymac Industries Inc.
MNU Menu International
NT Nitro Micro
SAF Safeware
SDA Software Discounters of America
WOC CDA World of Computers

FINANCIAL

BSW Bowers, Schumann & Welch
INC Business Incorporating Guide
DWR Dean Witter Reynolds
FT First Texas Savings
HRB H&R Block
MU Max Ule Discount Brokerage

GIFTS/NOVELTIES

AK Alaska Teleshopper
BG BannerGram by Mail
HI Hawaiian Isle
JE J.E. Smith Brassware
LM Lincoln Manor Baskets
TF Tooth Fairyland

GOURMET/FLOWERS

COF Coffee Emporium
FTH Fifth Avenue Shopper
FFS Florida Fruit Shippers
SIM Simon David
WK Walter Knoll Florist

HEALTH/BEAUTY

BS B&K Beauty Supplies
MN Merle Norman Cosmetics

HOBBIES/TOYS

DD Don's Dollhouse & Miniatures
HC Hobby Center Toys
DO The Doll Place
TSR TSR Hobby Shop

MERCHANDISE/ELECTRONICS

ATT AT&T
BD Black & Decker Powerline Network
ORD CompuServe Store
CFD Crutchfield
GC Garden Camera & Electronics
SV Stereo/Video Factory

MUSIC/MOVIES

BMG BMG Direct Marketing, Inc.
EMC Express Music
MV Magic Castle Video
MAO Music Alley Online

OFFICE SUPPLIES

EX Executive Stamper
OM Office Machines & Supplies
SC Stationery Center

ONLINE SERVICES

EF EF Hutton
NN NewsNet
OA Official Airline Guides, Inc.

PREMIUM MERCHANTS

AXM American Express Merchandise
MMA Metropolitan Museum of Art

SPORTS/LEISURE

BB Bike Barn
RR Rin Robyn Pool 'N Patio

TRAVEL/ENTERTAINMENT

AF Air France
AT Ameropa Travel

HOW TO ORDER FROM THE MALL

Shopping The Mall.

Ordering from The Electronic Mall is easy. Each time you enter a Mall store, a personal order file, much like an electronic shopping cart, is opened for you. Browse a store's database, and when you see a product you would like to buy, type the letter "O" and the order will be placed in your file, similar to selecting an item from a store's shelf and placing it in your cart.

You can order directly from the product description page — there is no need to return to a store's top menu. You can order one item or a dozen. When you type "O," the system does not complete your order; it only registers your desire to make a purchase.

Checking out.

To complete your order, you must "check out." You can do this by typing CHECKOUT, the GO command of the next store you wish to visit or any command that takes you elsewhere on CompuServe. This tells the system you are ready to complete the order process and presents two options:

1. Cancel your order by typing EXIT.

2. Complete your order by responding to a series of prompts for additional information.

When you have supplied the necessary information, you will receive an order summary. You now have the chance to change part or all of your order. For example, if you've ordered three books but decide you only want two of them, you can delete one book from your order. Or maybe you would like to have your order shipped to your office instead of your home. You can make that change, too.

Once you've made any changes, you again will have the chance to review your order. When you confirm the order as correct, you will receive an order confirmation number. *At this point, your order is complete.* It is sent electronically to the Mall merchant's CompuServe mailbox for processing. The order process is the same for every Mall merchant, but methods of payment and delivery may differ. If you have questions regarding your order, it is best to contact the merchant directly by using the customer service information provided within each store.

GOINGS ON—AT A GLANCE

SEPTEMBER

		1	2	3	**4**	5
6	7	**8**	9	10	**11**	**12**
13	**14**	15	16	17	18	19
20	**21**	22	23	24	25	26
27	**28**	29	30			

OCTOBER

					1	**2**	**3**
4	**5**	6	7	8	9	10
11	**12**	13	14	15	16	17
18	**19**	**20**	**21**	22	23	24
25	26	27	28	29	30	**31**

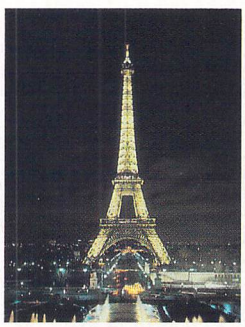
Sept. 1
- Software Discounters' Sidewalk Sale. GO SDA

Sept. 4
- NewsNet free connect day. GO NN*

Sept. 8
- Your Number's Up! starts up. GO YNU
- Take a complimentary tour of Air France. GO AF

Sept. 11
- NewsNet free connect day. GO NN*

Sept. 12
- 24 hours of free connect time from NewsNet, GO NN*, and AT&T, GO ATT*



- Try on Apparel Concepts for Men without your checkbook. GO APC

Sept. 13
- Grandparents' Day. Remember them with the FTD Sweet Memories Bouquet. GO WK

Sept. 14
- First 25 winners of Your Number's Up! posted online. GO YNU

Sept. 21
- 25 new winners of Your Number's Up! posted online. GO YNU

Sept. 28
- Another 25 winners of Your Number's Up! posted online. GO YNU

Oct. 1
- Buick Magazine free connect day. GO BU
- Software Discounters of America's Early Bird Christmas Shopper promotion takes flight. GO SDA

Oct. 2
- Buick Magazine free connect day. GO BU

Oct. 3
- Buick Magazine free connect day. GO BU

Oct. 4
- Buick Magazine free connect day. GO BU

Oct. 5
- Another 25 winners of Your Number's Up! posted online. GO YNU

Oct. 12
- 25 more winners of Your Number's Up! posted online. GO YNU
- Survey Columbus Day Savings at Apparel Concepts for Men—gratis. GO APC*

Oct. 18
- Charter a complimentary visit to Air France. GO AF
- Take your best shot at Your Number's Up! GO YNU

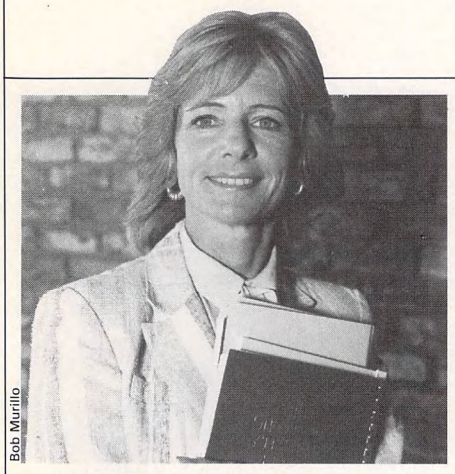
Oct. 19
- The final 25 winners of Your Number's Up! posted online. GO YNU

Oct. 20
- Your Number's Up! Grand Prize Winner announced online. GO YNU
- NewsNet free-connect day. GO NN*

Oct. 21
- Online opening of Holiday Bazaar '87. GO HOL
- The entire Electronic Mall is accessible free of connect charges.

Oct. 31
- Final Day of Software Discounters of America's Early Bird Christmas Shopper promotion. GO SDA

* Please remember that for Mall promotions that include free connect time, all applicable communications surcharges remain in effect. (Free connect is always from midnight to midnight.)



Redefining the classroom: *Kennedy*

Long-distance learning: *Zacks*

Linking Up to Learn

Electronic University Network Expands Educational Options

The Electronic University Network, now available on CompuServe, can connect your personal computer to more than 100 college courses from instructors coast to coast. Founded in 1983 by TeleLearning Inc., the Electronic University Network has helped thousands of students earn college degrees and credits in their own homes.

EUN puts a university at your fingertips, turning your computer into a learning tool that can access the wisdom of professors at schools such as Boston University, Penn State, University of Maryland, University of Iowa, University of Illinois, and several other institutions. Do you want to sharpen your writing skills? You can enroll in "Written Expression," offered by DeAnza College through the Electronic University. Perhaps you want or need college-level coursework to enhance your professional skills. EUN's catalog includes courses in accounting, finance, management, marketing, and other business-related courses, as well as an impressive array of offerings in the humanities, social sciences and natural sciences.

Most courses offer college credit, either granted through the delivering institution or via standardized tests such as the College Level Examination Program, which students arrange to take after successful completion of an EUN course. Either way, these credits can add up to a degree granted by accredited colleges via EUN. At present, students can earn a B.S. or associate degree in business or liberal arts from the University of the State of New York (Regents College Degrees), from Thomas Edison State College in New Jersey (B.S. in Business Administration and associate degrees in management or arts), and from John F. Kennedy University, which offers an M.B.A. degree. Credits earned from EUN courses can usually be transferred to other degree-granting institutions. (Since most colleges and universities have their own policies regarding the transfer of credit, it is wise to check first to make sure that Electronic University Network credits can be accepted.)

You don't need to be in a degree program, though, to plug into the electronic campus. The changing employment environment of the 1980s puts many would-be students in a bind. They may want or need college-level coursework to keep up with the latest information in their career specialties, to advance in their current jobs or to qualify for new jobs. You might decide, for example, that some knowledge of managerial accounting would help you realize your personal and career goals. But the right course at Mytown College or Nearby U. may not fit into your schedule. With the Electronic University Network you can create your own schedule on your own "campus"—your den, spare room or wherever you have your computer and modem. After paying an enrollment charge and a tuition fee for each course, you receive instructional diskettes, textbooks and access (via electronic mail) to instructors who answer your questions, respond to your ideas, and help you move successfully through each course.

For men and women busy on the job during the day and occupied with family responsibilities at night, EUN's "campus"—open 24 hours a day— can help them move ahead at their own pace. Working at a quiet time in a quiet corner of their own homes, students can learn as much, and as quickly, as students who disrupt their lives to travel to nearby colleges and universities. Anytime day or night, EUN students know their questions will get through to their instructors and know they can expect an answer. That's what turns the personal computer into an important tool for collaborative learning: the direct interaction between instructor and student.

CompuServe is furthering this interaction by providing a communications link between instructors and students. Initially, CompuServe subscribers can query EUN for information regarding course offerings and enrollment procedures.

Your CompuServe connection can now turn your computer into a branch campus, linking you and your family into this new learning environment. You can get information about EUN course offerings and charges by typing GO EUN at any prompt. Over the next few months, capabilities will be added to EUN, enabling EUN classmates to communicate with each other and with their instructor. The online conference, already familiar to thousands of CompuServe subscribers, will soon turn into an educational forum that links students and instructors from coast to coast. Whether you're taking accounting or marketing or sociology or a college-level survey of American literature, your computer and modem will put you in touch with others pursuing the same goals, and with instructors who can help you reach those goals.

"The Electronic University Network has already helped thousands of men and women find a new path to college credit and degrees," says Dorrie Kennedy, EUN's vice president of educational services. "Besides providing access for thousands more, CompuServe's interactive communications capabilities will expand the electronic classroom concept."

Says Mary Beth Zacks, CompuServe product manager, "It's a new educational delivery system. The old system, in place for hundreds of years, required students to show up at scheduled times and places to hear what instructors had to say. CompuServe's conference capabilities provide a new kind of interaction between an instructor and his or her class, even though classmates may be thousands of miles apart."

— Richard Elias

NEW PRODUCTS

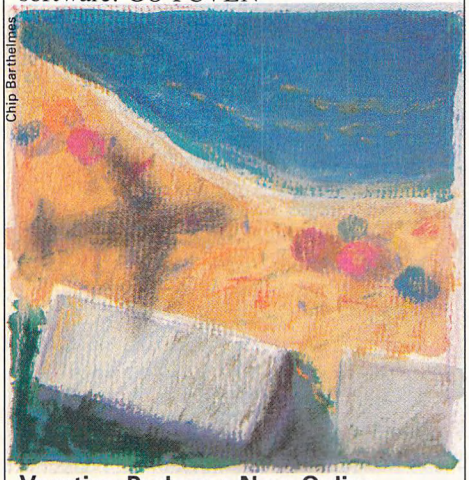
More Support for IBM PC Owners

The PC Vendor Support Forum, now available on CompuServe, provides support by four IBM PC vendors with data libraries and a message board.

ButtonWare will provide support for its PC-File+ software and its word processing, graphics and communications products.

Mansfield Software will support REXX, a new programming language originating on mainframes using IBM's VM/CMS operating system; and KEDIT, a text editor for the IBM PC that is compatible with many features of XEDIT, the IBM text editor for the CMS timesharing system.

The Software Group will support Enable, an integrated software package for the IBM PC, and Brøderbund will support entertainment and productivity software. GO PCVEN



Chip Barthelmes

Vacation Packages Now Online

The Official Airline Guide Electronic Edition has added about 50 Thomas Cook vacation packages offering discounts of up to 20 percent.

The packages include departures from Boston, Chicago, Dallas, Houston, New York City and San Francisco. GO OAG

Controller Ranks Added to *ATC*

Air Traffic Controller announces the addition of controller ranks based on the accumulation of points awarded at the end of each controller's shift.

Each collision, near miss or crash reduces the number of points awarded.

Players are assigned controller ranks including trainee, controller, *ATC* coordinator and *ATC* supervisor. The players with the highest point totals will have their names posted in *Air Traffic Controller's* Hall of Fame. GO ATCONTROL

Discussions in Religion Forum

The Religion Forum has conferences each Monday at 9 p.m. EDT to discuss a variety of topics and news events, including the "Bakker/PTL scandal."

The data libraries of the Religion Forum provide information about world religions, Christianity, Judaism, skepticism, ethics, research, scripture study, biblical archaeology, interfaith messages and prayer requests. GO RELIGION

Online AA Meets Sundays

CompuServe's Health Forum sponsors an online Alcoholics Anonymous group meeting every Sunday at 9:30 p.m. EDT in the Health Forum's conference area.

Accounts of the weekly conferences are available in Data Library 4 of the Health Forum. Recent topics include brainfever, resentment, responsibility and changes caused by sobriety. GO HCM-660

Health Directory Online

The Health Resources Directory, a service listing hundreds of health organizations by topic, is now available.

The directory is updated several times each month and new information is continually added, including the names, addresses and phone numbers of health organizations and self-help groups throughout the country.

The directory is divided into three sections: general/self-help, disease specific and women's resources. Questions and requests for more information may be left in the Health Forum. GO HCM

The Latest Edition

Grolier's Online Encyclopedia Keeps Up with Changing Times

If it's current information you want, you won't find it in an encyclopedia. Right? That depends on the encyclopedia.

Instead of using traditional encyclopedias, which are updated once a year, CompuServe subscribers can access an encyclopedia database that is updated four times a year—Grolier's online edition of the *Academic American Encyclopedia*.

The online *Academic American Encyclopedia* offers up-to-date, in-depth coverage of contemporary issues and events, popular culture, international affairs, current technology, and historical information on topics ranging from Aachen to zygote.

As in other top-ranked encyclopedias, you can read about the Wars of the Roses, Julius Caesar and malaria in the online encyclopedia. Unlike most encyclopedias, however, the online *Academic American* contains articles about the conflict in South Africa, Bruce Springsteen and AIDS.

Suppose, for example, that you're looking for information on surrogate mothers. You can, of course, go to a nearby library for the information. But, before you do, why not check the online *Academic American Encyclopedia*?

Simply log onto CompuServe and type GO ENCYCLOPEDIA at any prompt. If you haven't already done so, you need to subscribe to the online encyclopedia. From the time you choose the subscription length that best meets your reference needs, you have immediate and unlimited access to the encyclopedia.

Once you're a subscriber, access the encyclopedia and type SURROGATE MOTHER as your search term. The encyclopedia then finds and displays the article on your screen.

The article highlights the legal, ethical and technological issues surrounding surrogate mothers. In addition, it provides a bibliography you can use to find more information.

Beyond adding the new, Grolier updates the old. The encyclopedia contains articles on recent events, such as the Iran-contra affair, and special updates on historic topics, such as the 200th anniversary of the United States Constitution.

These updates make the encyclopedia a great place to start your research or just to check a fact. Cross-references, fact boxes and tables further enhance the ease with which you can use the online encyclopedia.

— Matthew Burns

Ask Customer Service

Q: I would like to find news on CompuServe. How do I access this information quickly?

A: To access news services on CompuServe, type GO NEWS at any prompt.

Q: How can I find business news and press releases as soon as they become available?

A: CompuServe offers The Business Wire. As a wire service, The Business Wire provides press releases as soon as they become available. It is updated continuously throughout the day. To access The Business Wire, type GO TBW at any prompt.

Q: Where can I get the latest news without paying a surcharge?

A: The AP Videotex service on CompuServe provides hourly-updated news. Categories include Washington News, National News, World News, Sports and Financial News. Type GO APV.

Q: What is the Executive News Service?

A: The Executive News Service is a unique electronic clipping service available to subscribers with the Executive Option. The Executive News Service automatically clips stories for you as they come across the news wires and stores them in electronic folders for you to review at your convenience. To access the Executive News Service, type GO ENS at any prompt. For more information on the Executive Option, type GO EXECUTIVE at any prompt.

Q: Is there a surcharge for the Executive News Service?

A: ENS carries a surcharge of $15 per hour at all times over base connect rates. This surcharge is only in effect while you are in ENS creating folders, reviewing stories, and scanning late breaking and current news.

Q: Can I share ENS clippings with other CompuServe subscribers?

A: While reviewing your clippings, you can send a story to another subscriber or yourself by typing SEND. ENS will prompt you for the person's User ID number and will automatically forward the story. The stories sent to EasyPlex can then be downloaded or read online.

Q: What news wires are available in ENS?

A: The Executive News Service can clip stories from the Associated Press state and national news wires, Reuters, OTC NewsAlert and *The Washington Post*.

Q: When I clip stories in ENS, I receive too many stories in my folder. Why does this happen?

A: If you use keyword phrases that are too general, you may find unwanted stories in your folder. For example, if you type the separate keyword phrases COLLEGE and FOOTBALL, ENS would clip all stories on COLLEGE and all stories on FOOTBALL. One way to improve your story selection would be to enter the key phrases using a plus sign (+), such as COLLEGE + FOOTBALL. This would cause ENS to clip only those stories that contain both words, but not necessarily together.

Q: Where can I get the latest information about CompuServe and the computer industry?

A: Information about the computer industry, software and book reviews, and what's happening on CompuServe can all be found in *Online Today Electronic Edition*. This online supplement to the monthly CompuServe magazine is updated several times a day. To access it, type GO OLT at any prompt.

Q:Where can I find the latest news on the entertainment industry?

A: You can find the latest entertainment news in the Executive News Service (GO ENS), the AP Videotex (GO APV) and the Hollywood Hotline (GO HHL).

— Dave Smith and Tina Evans

These answers and more are available in Customer Service's Question & Answer Database. You can find answers to questions about billing, logging on, using forums, sending EasyPlex messages, using the Personal File area, setting up a Personal Menu and more. Type GO QUESTIONS at any prompt on the CompuServe Information Service.

Gift of Time

Online Today offers subscribers the chance to write a 200-word essay on how they use CompuServe's Information Service.

Your essay should be typed double-spaced and sent to *Online Today,* CompuServe Incorporated, 5000 Arlington Centre Blvd., P.O. Box 20212, Columbus, OH 43220, or by an EasyPlex message to 70003,3246. Please include your full name, address and User ID number.

If we use your column, you will receive 10 hours of standard service connect time (a $60 value) and a byline.

CompuServe: Window to the World

Before I used CompuServe, I felt that my time spent with my computer was an isolating, one-on-one experience. CompuServe has changed that. From the moment that I signed on, I felt that I had just been accepted into a powerful windows to the world.

Sometimes I catch up with messages in the *Family Computing* Forum and then spend time browsing through the data libraries. With CompuServe the weather reports and latest sports scores are at my fingertips (especially those late-night West Coast games that don't make the next morning's East Coast newspapers). The latest news is available long before it reaches the newsstand. And if I forget to videotape my daily soap opera, I have the Soap Opera Summaries to fall back on.

Jay H. Wald
Whippany, N.J.

What's Going On?

If you want to know what's going on around CompuServe, check into *Online Today Electronic Edition*. Here you'll find constantly revised news for and about the CompuServe community. GO OLT-50 from any prompt on the CompuServe Information Service.

ONLINE TODAY

New Forum Files Increase Productivity

The data libraries in CompuServe's forums are filled with thousands of programs and textfiles. The following are a few of the files uploaded to the data libraries in recent months. For a more up-to-date list of uploads, check the "Uploads" columns in *Online Today Electronic Edition* by typing GO OLT-3700 at any CompuServe Information Service prompt. New columns are added twice monthly.

AMIGA FORUM
(GO AMIGAFORUM)

Amiga BBS — An online message and file handling system for the Amiga written by Patrick E. Hughes. File TAGBBS.ARC in Data Library 4.

ASTRONOMY FORUM
(GO ASTROFORUM)

Planet Program — A planet position program for the IBM-PC and compatibles. Shows positions of satellites, planets, asteriods and comets, and provides facts on planets and their orbits. Illustrates relative sizes and several graphic solar system representations. File PLANET.COM in Data Library 7.

AUTODESK FORUM
(GO ADESK)

Font Files — AutoCAD font files for Gothic, Bold, Triplex and other non-standard fonts. File FONTPA.ARC in Data Library 2.

AI EXPERT FORUM
(GO AIE-100)

Expert Trust — An academic paper for a senior-level college course that addresses the question: How much would you trust the opinion of an expert system? Several members of the AI Expert Forum contributed their opinions to the paper's author. ESPPR.TXT in Data Library 5.

ATARI 16-BIT FORUM
(GO ATARI16)

Lister Program — Atari Super Lister, allows you to view on the screen or list to a printer up to 10 files that can be entered from the command line. Features fast scrolling and has built-in search features. File ASL.ARC in Data Library 3.

ATARI 8-BIT FORUM
(GO ATARI8)

Maze — A machine code maze game. Requires 48K and joysticks. File MAZEM.BAS in Data Library 1.

BROADCAST PROFESSIONAL FORUM
(GO BPFORUM)

Online TV Instruction — "The Elements of TV Optics," a combination textfile (OPTICS.TXT) and 19 GIF picture files (GOP01.GIF through GOP19.GIF) that support the textfile for CompuServe subscribers. "The Elements of TV Optics" is by Carl Bentz, TV technical editor for *Broadcast Engineering Magazine*. All files located in Data Library 4.

COMMODORE ART/GAMES FORUM
(GO CBMART)

Text Adventure — Anksetan, an all-text adventure for the Commodore. It is so difficult, the creator says, that no one has solved Part I after one year of play. File ANKSET.IMG in Data Library 9.

EDUCATION FORUM
(GO EDFORUM)

SAT Preparation — A textfile that identifies popular Scholastic Aptitude Test preparation software packages and offers annotations describing strengths and weaknesses of the programs. File SAT.TXT in Data Library 2.

IBM COMMUNICATIONS FORUM
(GO IBMCOM)

QMODEM Help — Allows for full maintenance of the phone directory for QMODEM 3.0 or later. File QFONED.ARC in Data Library 2.

Call Waiting — A BASIC program to avoid call waiting problems and instructions on how to prevent call waiting from interfering with telecommunications. File CW.BAS in Data Library 2.

IBM SOFTWARE FORUM
(GO IBMSW)

Count Program — A new version of the COUNT program that is faster, counts multiple files, accepts wildcards and has command line switches to count ASCII characters only and to skip blank lines. Public domain. File COUNT.ARC in Data Library 2.

IBM NEW USERS FORUM
(GO IBMNEW)

Teaching Aid — A text adventure and geographical learning game for elementary-age school children. File SAMERI.ARC in Data Library 9.

INVESTORS' FORUM
(GO INVFORUM)

Commodities — A transcript of a conference with commodity traders Marc Kortlander and Steve Conlon. Files FUTURE.ARC and FUTURE.CO in Data Library 4.

ISSUES FORUM
(GO ISSUES)

Economics — A textfile that discusses building a bridge between macro and micro economic thinking. File MACMIC.FW2 in Data Library 16.

MICROPRO FORUM
(GO MICROPRO)

Envelope Addresser — The latest version of GRAB, a memory resident envelope printer that will take the name and address from a letter typed by any of the MicroPro word processors and print it on an envelope. Type BRO GRAB* at the DL prompt in Data Library 7.

MODEL 100 FORUM
(GO M100SIG)

Loan Program — A program for the Model 100 or Model 102 that will calculate missing loan information. You supply the known values and the computer figures the missing value. Once all the values are known, a chart of the payments and remaining balance can be printed or sent to a device or RAM file. File LOANS.100 in Data Library 4.

MODELNET
(GO MODELNET)

Dimension Calculator — A program for the Apple II and compatibles that takes the size and speed of a prototype boat and calculates scale dimensions. File MODBOA.EXE in Data Library 11.

PHOTOGRAPHY FORUM
(GO PHOTOFORUM)

Lotus Photo Computations — A collection of Lotus worksheet files that will allow you to do various photographic computations. File FTOWKS.ARC in Data Library 2.

SPACE FORUM
(GO SPACEFORUM)

NASA Conference — An edited transcript of an online conference with NASA Program Manager Jesco von Puttkamer. File JESCO.CO in Data Library 9.

TANDY PROFESSIONAL FORUM
(GO TRS80PRO)

DOS Picture Display — A program that takes BASIC-like draw and paint commands and displays pictures directly from DOS. For the Tandy 2000. File DRAW.ARC in Data Library 9.

David Peyton co-authored How to Get the Most Out of CompuServe *and* Advanced CompuServe for IBM PC Power Users. *His CompuServe User ID number is 76703,244.*

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Ashton-Tate Forum Supports Business Software Users

Mastering business software on your own can be a lonely and sometimes frustrating process. While learning the simple commands isn't too tough, most users later want tips from others on shortcuts and more complicated routines. That is where the Ashton-Tate Forum (GO ASHFORUM) and the Ashton-Tate Support Library (GO ASHTON) come in.

"We view the forum as an alternative to telephone support," says Kent Irwin, forum administrator and project supervisor of electronic publishing at Ashton-Tate, a company best known for such popular programs as dBase, Framework and MultiMate. "Phone support of software has become an industry standard, but there is an enormous overhead associated with it, and it is not always convenient for the customer," he says. "Online support is better because we can supply consistent answers to many people simultaneously. Also, the users can support each other, with experts helping out the novices."

Provided by the Ashton-Tate Software Support Center, the forum offers users of dBase II, III and III Plus, Framework, MultiMate, RapidFile and Master Graphics expert help from Ashton-Tate's own technical advisors and customer support personnel. In addition to answers to specific questions, forum members receive sample programs and utilities to help make the most effective use of the products.

The sections on the forum's message board are devoted to specific Ashton-Tate products with experts available in each area to answer users' questions. The newest sections feature MultiMate Advantage II, RapidFile and Master Graphics, including Chart-Master, Diagram-Master, Map-Master and Sign-Master.

MultiMate Advantage II is a powerful word processor designed especially for managerial and professional users who want quick results without taking a lot of time to learn to use the software. Features include the option of document or page orientation, an optional, pull-down menu interface, a merge with dBase files, an extensive undo/delete function, a directory of key procedures, a comment feature to annotate documents and more. Susan Schafer is the assistant forum administrator in charge of MultiMate technical support.

RapidFile, which is managed online by assistant forum administrators Steve Silverwood and Ken Getz, enables business users to manage data, create reports, write form letters and produce mailing labels. It is targeted to business users who need to accomplish tasks quickly and easily but do not need a broad range of relational database power for applications development.

Directing the Master Graphics section of the Ashton-Tate Forum is assistant forum administrator Jennifer Cook. Master Graphics is a series of business graphics programs that includes Chart-Master, Diagram-Master, Map-Master and Sign-Master. Forum discussions often center on support for various printers and plotters as well as distribution of compatibility software as new hardware debuts.

Each of these Ashton-Tate specialists checks into the forum daily to provide technical support for the products.

The forum sponsors regular Thursday conferences from 9:30 to 10:30 EDT with Ashton-Tate staff on hand to answer questions and offer tips. A complete schedule of upcoming conferences is posted in the forum's conference bulletin.

Another service offered online by the Torrance, Calif.-based firm is the Ashton-Tate Support Library. Irwin describes this area as more static than the forum, where things are always on the move. The information found here, however, can be invaluable to novice and expert users alike. The menu-driven reference system provides excellent, complete answers to many commonly asked questions on Ashton-Tate products, new product announcements and product updates.

The Technical Support Library (option 6 on the main menu) contains reference material on dBase II, III and Framework, including documentation supplements, usage tips and workarounds to reported bugs or anomalies. Irwin says that corrections to the anomalies are among the most popular areas of the library. Other resources include upcoming training seminars, customer service information, an Ashton-Tate product list and a user survey. Irwin reports that user survey results are given to Ashton-Tate managers who refer to them when designing new products and updating current ones.

The most efficient and cost-effective way to use the library is to download and print the menu map (GO ASH-946). Although it is more than 300 lines long, it provides the exact GO commands for every item in the library. For instance, if you want the anomalies and workarounds for dBase II, you can avoid menus with a simple command (GO ASH-195).

"Online support is definitely the wave of the future," says forum administrator Irwin. "Users can simply sit in their homes, leave us questions and receive answers in a timely, convenient manner."

— Cathryn Conroy

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Ticker Input File Saves Users Time, Money

Following the latest stock market trends as the basis for making important investment decisions requires commitment of time and money. One way of saving on both is through the creation of a personal ticker input file for keeping track of your stocks.

By creating a special file listing your personal stocks, you can get the latest price quotes at the touch of a button and get the information you want quickly while significantly reducing online connect-time charges.

Quotes for stocks and options are available online throughout the trading day with a 20-minute delay. In addition, mutual fund net asset values, money market fund yields and foreign currency exchange rates are updated nightly and are available by 6 p.m. Your personal ticker input file can be used over and over, resulting in daily savings of time and money.

The file can be used in most programs accessing the MicroQuote and Quick Quote databases, including "Current Quotes," "Pricing History—1 Issue" and "Data Retrieval." To create your own ticker input file, type GO MQUOTE. When you arrive in this area, you will receive the following message on your screen:

MQUOTEII!

After the exclamation point, type EDIT and you will be prompted for the name you want to give your ticker input file. (A typical name might be STOCK.DAT.) After you type in the filename and hit the Return key, the system will tell you that the new file has been created. At this point, you simply type in—one line at a time followed by hitting the Return key—the ticker symbol of the stocks you are following. You can enter up to 500 ticker symbols or CUSIP numbers. If you don't know the ticker symbols, you can look them up in the Issue/Symbol Lookup Menu (GO SYMBOLS).

When your list is completed, type /EXIT and you will receive the MQUOTE II! prompt again. At this point, you should type GO QQUOTE and you can check the prices of your stocks in the Current Quotes database by simply typing @STOCK.DAT (or whatever file name you have given your ticker input file) at the ISSUE: prompt.

In addition to the most recent price, CompuServe will then give the company name, volume, high and low prices, change and time of the last update of each of your stocks listed in the file. The ticker input file can now be used as often as you wish. All you have to do is type GO QQUOTE and @FILENAME at the ISSUE: prompt to again check on stock quotes. You can easily add or delete stocks via the EDIT command in MQUOTE.

The ticker input file can be personalized to achieve compatibility with most spreadsheet packages. The use of the /OUTPUT command as the first line in the ticker file allows you to place data in a file with the extension .PRN (such as /OUTPUT= STOCK.PRN) for use in a Lotus 1-2-3 worksheet. Within EDIT, type /T, then //OUTPUT=STOCK.PRN. Then, type /EX. Price quotes recorded in a .PRN import file will automatically be stored in variable length format, with commas between the items and quotation marks around the ticker symbols. You can verify this by running STOCK.DAT through Quick Quote, then entering TYPE STOCK.PRN at the MQUOTEII prompt. To transfer this information into your Lotus worksheet, first download the file you created and enter FILTRN at MQUOTEII, being sure to retain the extension as .PRN. Then enter your Lotus worksheet and type in the /FIN (file import numbers) command.

In addition to this formatting, the Current Quotes database can customize the data to reduce each field to the minimum numbers of characters needed to represent the data and place quotation marks around text fields or specify the number of digits of precision.

A detailed list of these commands and many more plus complete instructions on their use is available online in the introductory menu of Quick Quote. To read the information, type /H at the ISSUE: prompt. First-time users may want to download and print the information for referral.

Creating a ticker input file is a simple process that takes only a few minutes and can save you online time — and money — for all future searches. And although there are surcharges assessed for receiving stock quotes, there is no cost beyond the usual connect-time fees for time spent creating your ticker input file.

— Cathryn Conroy

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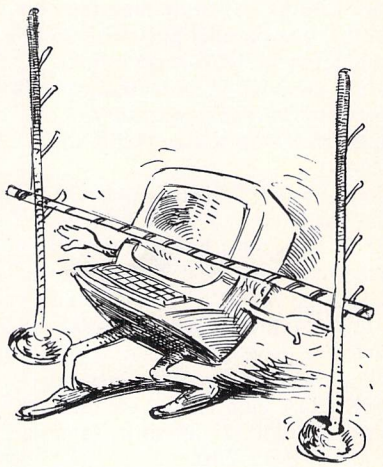

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Grande Byte Plus Card

Packs 2.5MB of Extended Memory

STB Systems
P.O. Box 850957
Richardson, TX 75085-0957
214/234-8750

Computers: PC-AT and compatibles with 16-bit expansion slots.
Operating System: MS-DOS or PC-DOS version 2.0 or higher for bundled software.
Features: Full-length 16-bit PC-AT-style extended memory card; 128K to 2.5MB of parity checked memory using 64K or 256K RAM chips; split memory addressing to fill system memory to 640K and continue extension at 1MB or above; one serial port with PC-AT-style nine-pin connector; one parallel port with 25-pin connector for IBM-style printer cable; includes PC Accelerator utility software; two-year warranty.
Options: Memory size (128K to 2.5MB).
Model Tested: 2.5MB Grande Byte Plus installed in 1,024K Proteus 286GT computer having one 360K diskette drive, one 1.2MB diskette drive, one 20MB hard disk, dual external 15MB Sysgen DuraPak cartridge drives, three serial ports, two parallel ports, STB Systems 256K EGA Plus video card and Amdek Color 722 monitor; running IBM PC-DOS 3.10.
Base Prices: $319 with zero memory to $1,495 with full 2.5MB memory

Reviewed by Ernest E. Mau

STB Systems' Grande Byte Plus card extends memory in an IBM PC-AT or compatible computer. It provides AT-style "extended" memory on a 16-bit card. It doesn't provide Lotus-Intel-Microsoft "expanded" memory even though the card's manual constantly refers to "expansion memory."

Memory chips populate 90 sockets in five 18-socket rows. Either 64K or 256K RAM chips may be used, but any one row must hold all the same type. However, rows may be mixed and matched, so two rows might have 64K chips while three rows have 256K chips. If filled with 64K chips, the card holds 640K, but a 2.5MB capacity is achieved when all sockets are populated with 256K chips.

Grande Byte Plus also provides one serial port and one parallel port having connectors on the card's mounting bracket. The serial port can be addressed as COM1, COM2 or COM3, but not COM4. Similarly, the parallel port can be addressed only as LPT1, LPT2 or LPT3. My Proteus 286GT computer already had three serial ports and two parallel ports on its system board, so I turned off the Grande Byte Plus serial port to prevent conflicts.

Card installation should be simple for most computers. Of 16 DIP switches, two set the serial port address, two set the parallel port address, and 12 others set the Start Address and Mode-I/O operation according to the chips used and the memory already in the computer.

The manual has detailed but sometimes contorted instructions for existing 256K, 512K or 640K base memories but gets evasive for machines already having more than 640K. My computer already had 1024K, with 384K "above 1 megabyte." Although it seems obvious now, it took a while to verify that the Grande Byte Plus really had to be installed at the 384K boundary inside megabyte 1, not at megabyte 0 as I first thought.

To finish installation, the Grande Byte Plus manual relies on IBM's Setup program, which should be simple. But my Proteus Setup program provided no memory-defining options. Instead, I had to disconnect the computer's internal battery, wait 20 minutes to clear old CMOS settings, reconnect the battery, start the computer and then run Setup. New memory then was recognized automatically, and subsequent rebooting tested and reported 3,584K of system memory.

I couldn't make the Proteus computer recognize the new parallel port. I suspected some internal system conflict but couldn't find it. Eventually I gave up and settled for the parallel ports already in the machine.

I half expected problems running Grande Byte Plus in a 12.5-MHz computer but never experienced any. Extended memory was readily used by programs such as Lotus Symphony and AutoCAD without contorted software installations often needed for LIM expanded memory. I didn't see any oddities during software operations and never had to downshift to the computer's 6MHz speed.

I doubt that the Grande Byte Plus gives the speed I might get at 12.5MHz by fully equipping 4MB directly on the Proteus system board, but no slowdowns were noticeable other than increased time (94 seconds) needed to boot the computer.

Like all STB Systems' plug-in cards, Grande Byte Plus comes with PC Accelerator (version 3.02) software, which can set up as many as 10 electronic disks plus printing buffers for up to three parallel ports. It also can reserve memory for DOS and user programs, configure expanded memory, adjust printer priorities and alter certain keystrokes. PC Accelerator can change the [CONTROL-ALT-DEL] key combination to reboot without wiping out the electronic disks. A full reboot with erasure then takes a [CONTROL-ALT-INS] combination.

Basic functions of setting up electronic disks and printer buffers worked fine without displacing software-driven external disk drives. I do wish PC Accelerator had serial port buffering (for pen plotters). I had trouble with keyboard functions. Attempts to warm boot while preserving electronic disks locked my keyboard. The manual warns of problems with programs that take control of the keyboard (I wasn't using any), but a suggested fix didn't work for me. I eventually switched off PC Accelerator keyboard functions, losing some attractive features.

Nevertheless, Grande Byte Plus is a capable, quality product. My few problems all relate to using an off-brand clone computer. In an IBM computer or closer twin, Grande Byte Plus could be impressive indeed. I caution buyers to check their software, however. I have many packages able to use LIM expanded memory, but only a handful that can use AT-style extended memory. In that situation, some other board might be a better choice.

Ernest E. Mau, a full-time free-lance writer and Online Today *reviews editor, is based in Aurora, Colo. He is the author of several books and nearly 300 articles on microcomputer products and applications.*

Trademarks: AutoCAD (Autodesk Inc.); DuraPak (Sysgen Inc.); Grande Byte Plus and EGA Plus (STB Systems Inc.); IBM, IBM PC-AT and PC-DOS (International Business Machines Corp.); Intel (Intel Corp.); Lotus and Symphony (Lotus Development Corp.); Microsoft and MS-DOS (Microsoft Corp.); PC Accelerator (Resicorp.); Proteus 286GT (Wintech Data Products Corp.).

GO OLI or circle 12 on the Reader Service Form.

BOCARAM/XT

Provides No-Frills EMS-Standard Memory Expansion

Boca Research
6401 Congress Ave.
Boca Raton, FL 33431
305/997-6227

Computers: IBM PC, PC-XT, PC-AT and most compatibles, including high-speed 80286 AT-style computers up to 12 MHz.
Operating System: MS-DOS or PC-DOS version 2.0 or higher.
Features: Three-quarter length 8-bit expanded memory card; meets Lotus-Intel-Microsoft EMS 3.2 standard; 256K to 1MB onboard memory expandable to 2MB with piggyback card; uses standard 150-ns 256K RAM chips; selectable I/O port addresses; selectable D000 or E000 frame segment addresses; zero or one wait state operation; selectable parity checking; drivers, RAM disk and printer spooling software included.
Options: Memory size (256K to 2MB).
Model Tested: 256K BOCARAM/XT installed in 1,024K Proteus 286GT computer having one 360K diskette drive, one 1.2MB diskette drive, one 20MB hard disk, dual external 15MB Sysgen DuraPak cartridge drives, three serial ports, two parallel ports, STB Systems 256K EGA Plus video card and Amdek Color 722 monitor; running IBM PC-DOS 3.10.
Base Prices: $245 for 256K card, $345 for 1MB card and $575 for 2MB card.

Reviewed by Ernest E. Mau

With all the multifunction cards around, it seems strange to see a card that just provides expansion memory. However, many new MS-DOS computers, including PC-XT and PC-AT clones, come with full 640K memories for DOS, clock/calendar circuits and all the parallel and serial ports a user may need. So why pay for functions that may never be used?

BOCARAM/XT minimizes costs of EMS memory expansion by not adding unnecessary frills. The three-quarter length card simply provides room for RAM chips in four banks of nine sockets each. It holds up to 1MB of expanded memory using standard 150-nanosecond 256K chip sets. An accessory board not tested can expand it to 2MB, and four 2MB cards may be installed in one computer.

Boca Research set out to be compatible not only with the Lotus-Intel-Microsoft 3.2 standard but also with other brand cards as well. Although the manual doesn't identify brands, it details card configurations and device driver setups that handle generic multiple-card situations.

Another price cutting measure is the use of 8-bit expanded memory even in PC-AT and other 286 computers that can take 16-bit boards. According to Boca Research literature, expanded memory is accessed in 8-bit cycles, so it can be done efficiently with an 8-bit board. However, the BOCARAM/XT provides only "expanded" memory, not "extended" memory. For combined expanded and extended memory, the company makes a 16-bit BOCARAM/AT card.

Surprisingly, BOCARAM/XT works in high-speed PC-AT clones with processors running at up to 12MHz. Indeed, it works fine in a Proteus 286GT running at 12.5MHz. The card has a switch that selects zero or one wait state to accommodate different bus speeds, but it works either way in the Proteus. According to the computer manufacturer, the bus is slowed down to accommodate conventional cards. While the manufacturer gives no information on expansion memory and use of system-board memory with one wait state, I've seen no errors and no appreciable performance differences when switching the BOCARAM/XT between zero and one wait states.

Other BOCARAM/XT switches configure the memory I/O port address to one of four settings and set the frame segment address to either D000 or E000. I didn't have to disturb the default I/O port address, but the frame segment address threw me a curve. I already had the segment at D000 assigned to cache memory on the controller of an external drive system and tried the BOCARAM/XT at E000. The computer refused the expanded memory! Like many PC-AT clones, the Proteus uses E000 for other purposes, so the BOCARAM/XT has to be at D000. For various reasons, the other cache memory couldn't be relocated, so I had to strip it from the computer before I could use the BOCARAM/XT.

The possible conflict at segment E000 isn't documented. However, prospective buyers should realize that this card originally was designed expressly for XT-style machines. As it happens, the card works in AT-style machines, but odds are it will do so only if the D000 memory segment is free.

Once I had the card installed and the device drivers set up, the card functioned without problems. After the diagnostic program included with the card had given me a go-ahead, I began running applications. Without exception, computer-aided design, spreadsheet and other programs capable of recognizing and using expanded memory did so without problems.

Boca Research includes software to set up printer spoolers and RAM disks in expanded memory. Both worked, although I have no need for either function. I use an external printer buffer and don't need internal spooling. I also have five physical drives, so a RAM disk isn't really needed. Besides, I don't trust RAM disks because their volatile nature makes it too easy to lose work to power failures, computer shutdowns, reboots or carelessness. Boca Research software provides a way to preserve RAM disk contents through a warm reboot, but that doesn'ts39guard against power losses or user blunders.

Aside from the limited choice of frame segment addresses (no choice at all for my computer), the BOCARAM/XT seemed to be a practical, cost-effective way to provide LIM-EMS expanded memory. Its use of standard RAM chips and effective software combine to make the card quite practical.

Ernest E. Mau, a full-time free-lance writer and Online Today *reviews editor, is based in Aurora, Colo. He is the author of several books and nearly 300 articles on microcomputer products and applications.*

Trademarks: BOCARAM/XT and BOCARAM/AT (Boca Research Inc.); DuraPak (Sysgen Inc.); EGA Plus (STB Systems Inc.); IBM, PC, PC-XT, PC-AT and PC-DOS (International Business Machines Corp.); MS-DOS (Microsoft Inc.); Proteus 286GT (Wintech Data Products Corp.).

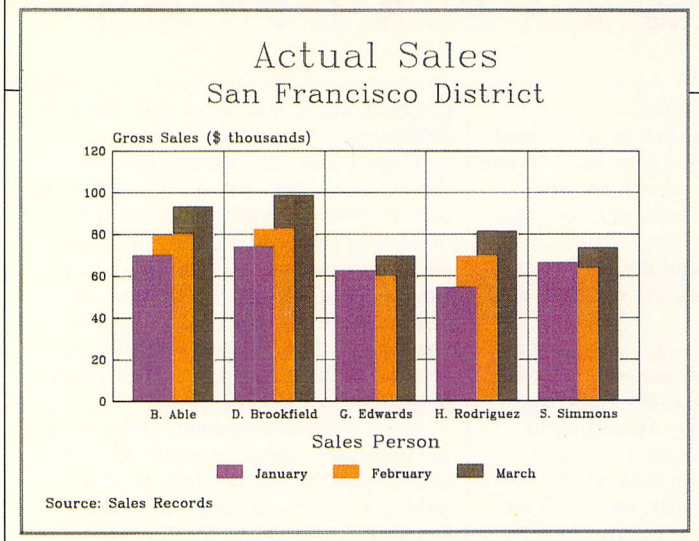
GO OLI or circle 13 on the Reader Service Form.

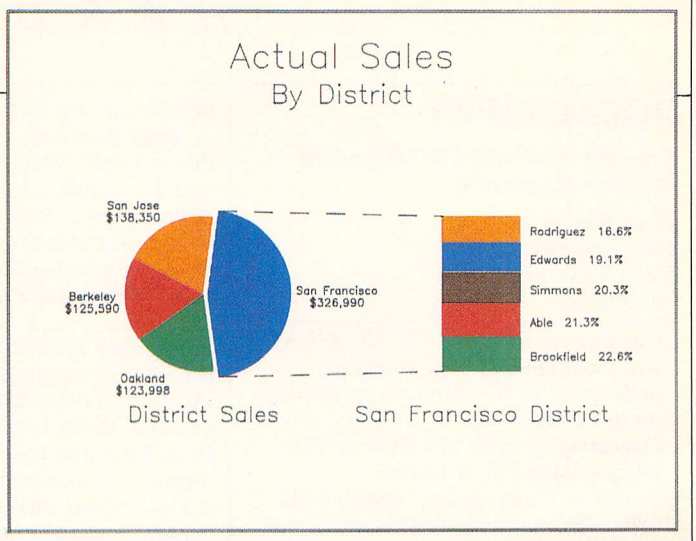
Electronic Edition Hardware Reviews

The following hardware reviews are available this month on *Online Today Electronic Edition* by typing GO OLT-220 at any CompuServe Information Service prompt.

Pelican 6.6 Mass Storage System
Manufacturer: *Pacific Micro Systems*
Computers: *IBM compatibles*

HiCard Memory Board
Manufacturer: *RYBS Electronics, Inc.*
Computers: *IBM compatibles.*





Designing data displays: *Professional Plan presents various graphics*

PFS:Professional Plan

Spreadsheet with Graphics

Software Publishing Corp.
1901 Landings Dr.
P.O. Box 7210
Mountain View, CA 94039-7210
415/962-8910

Computers: IBM PC, PC-XT, PC-AT and compatibles; AT&T 6300 & 6300 Plus; Compaq Deskpro, Deskpro 286 and Compaq Portable models; Epson Equity I, II and III; Leading Edge Model D and Model MH; Olivetti M24; Tandy Model 1000; Zenith Z-158, Z-171 and Z-200.
Operating Systems: PC-DOS or MS-DOS version 2.0 or higher (version 3.2 requires additional 64K of RAM).
Media: Requires two diskette drives or one diskette drive and a hard disk.
Copy Protection: None.
Required Peripherals: Graphics card required to display program's graphics.
Other Requirements: Minimum 512K of RAM; 640K of RAM required with Top View.
Optional Items: Printer (supports Diablo, Epson, Hewlett-Packard, IBM, Okidata, Tandy, TI and Toshiba models); pen plotter (supports Hewlett-Packard, Houston Instruments, IBM and Sweet-P Six Shooter models).
System used for test: 640K IBM PC-XT with two diskette drives, one 20MB Maynard hard disk, Hercules Graphics Card Plus and Okidata Microline 84 printer; running PC-DOS 2.1.
List Price: $249

Reviewed by William J. Lynott

It is difficult to write this review without becoming gushy. I have reviewed more than a dozen electronic spreadsheet programs, including some of the biggest names in the business, but I haven't been this enthusiastic over one in a long time.

When I first began working with Lotus 1-2-3, it was light-years ahead of the original VisiCalc. I couldn't imagine then how much room was left for improvements in spreadsheet technology. Now PFS:Professional Plan comes along, and I'm fascinated by features I could only dream of a few years ago.

Early spreadsheets did not permit different column widths in the same template. Lotus 1-2-3 took care of that with variable column widths. Professional Plan now boasts column widths that adjust themselves automatically as the needs arise. Type a column entry that is too large, and the width expands as you type. Shorten an oversized entry, and column width decreases to just the size needed.

Then there is the "Quick Key." Suppose you want to enter months across column headings. Press [CONTROL-Q] to enter Quick Key mode, type January in the first column and touch the Tab key. Professional Plan automatically enters February in the next column. Ten more strokes of the Tab key and all 12 months are entered. It works as well with days of the week or ascending numbers. Once you assign English names to Professional Plan columns and rows, you can use those names in place of cell addresses in formulas.

If you prefer to exchange the busy look of the Professional Plan display for a simpler 1-2-3 look, touching the F7 key pulls down an appearance menu. It lets you customize the appearance of your worksheet and set global formats.

These and many other entry features make it remarkably easy to set up a worksheet the way you want it. However, easy designing and formatting are just the beginning. Professional Plan incorporates most features of 1-2-3 and adds a bundle of its own.

For openers, Professional Plan recalculates large worksheets faster than 1-2-3. That is because it recalculates only affected cells instead of the entire worksheet.

Professional Plan uses pull-down menus instead of the tree-structured menu systems found in most other spreadsheets. This makes it faster and easier to get things done. The Quick Key feature lets you bypass menus with direct commands. For example, [CONTROL-G] brings up the prompt for retrieving a worksheet. Most menu choices can be entered directly.

Professional Plan's documentation is a delight. It is well organized, sensibly written and beautifully presented. However, context-sensitive help screens are available through the F1 key. They are so well done that you should be able to stash the users manual after a brief training period.

Business graphics capabilities in Professional Plan are simply the best I've seen in a spreadsheet. True presentation quality charts and graphs can be created easily. This feature is so well done that it could stand alone as a graphics program.

Professional Plan will create point, line, curve, trend, pie, bar and high-low-close charts. Graph options are numerous and easy to follow. I was creating graphs from imported 1-2-3 worksheets within an hour. You can generate color graphics if you have a supported plotter. Separate tests by *Online Today's*

reviews editor revealed no obvious plotting problems using a Hewlett-Packard 7475A Graphics Plotter.

Professional Plan can read and write directly to Lotus 1-2-3 worksheets. You can import a 1-2-3 file, revise it and save it as a Professional Plan file, or you can save it back to 1-2-3 format.

All values and formulas remain intact when importing or exporting. However, 1-2-3 macros won't work in Professional Plan. They're saved only as text entries, which could be a disadvantage in complex files containing elaborate macros that would have to be recreated. With that exception, 1-2-3 files (version 1A or 2) worked perfectly when imported to Professional Plan.

Professional Plan's macro system is easier to learn and less cumbersome than most. A macro library feature lets you store macros in separate files. You then can link them to any number of separate worksheets.

A goal-seeking feature called the Target function will be a real time-saver for some users. How many product units would you have to sell to break even? How much would you reduce variable expenses to raise your gross profit to 40 percent? Target determines such things by making a series of lightning fast guesses and recalculating after each one. If the relationship between the goal cell and the cell being solved is linear, Target works very quickly. More complex relationships take longer, and Target may not be able to solve some really tough ones.

Printing a Professional Plan worksheet is a joy. You can select portions of a worksheet to design custom reports containing only specified information. Including non-contiguous columns or rows in a report is no problem. Headers, footers and custom print styles all can be selected from menu prompts.

As the old saying goes, there is no such thing as a free lunch. Professional Plan has one disadvantage that will be of importance to some users. Although it makes more efficient use of memory for file storage, it is still a memory hog. File size is limited only by available memory; however, the program requires at least 512K compared with 256K for Lotus 1-2-3.

The effect was clear when I tried to load a large 1-2-3 worksheet. Even with 640K of memory, all I could get was a message saying that the file was too large to load. Following a suggestion in the users manual, I tried trimming non-essential parts of the template such as the macro area but still had no luck.

If super large spreadsheets are your style, you may have to go to memory expansion beyond 640K to enjoy the benefits of this super program. Otherwise, it is an excellent spreadsheet package.

William J. Lynott is president of W.J. Lynott Associates, a management consulting firm in suburban Philadelphia. His CompuServe User ID number is 70007,420.

Trademarks: Hercules Graphics Card Plus (Hercules Computer Technology Inc.); IBM, IBM PC, PC-XT, PC-AT and PC-DOS (International Business Machines Corp.); Lotus and Lotus 1-2-3 (Lotus Development Corp.); MS-DOS (Microsoft Corp.); Okidata Microline (Okidata Div. of Oki America Inc.); PFS: and PFS:Professional Plan (Software Publishing Corp.).

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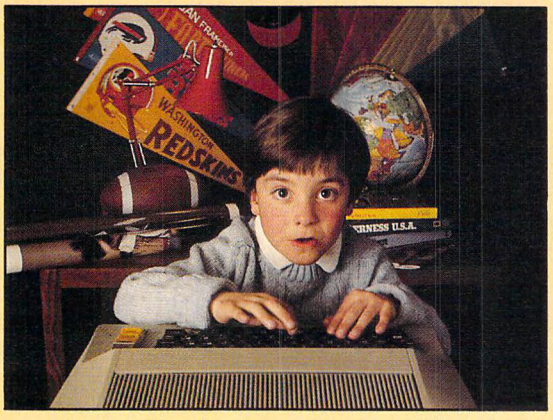

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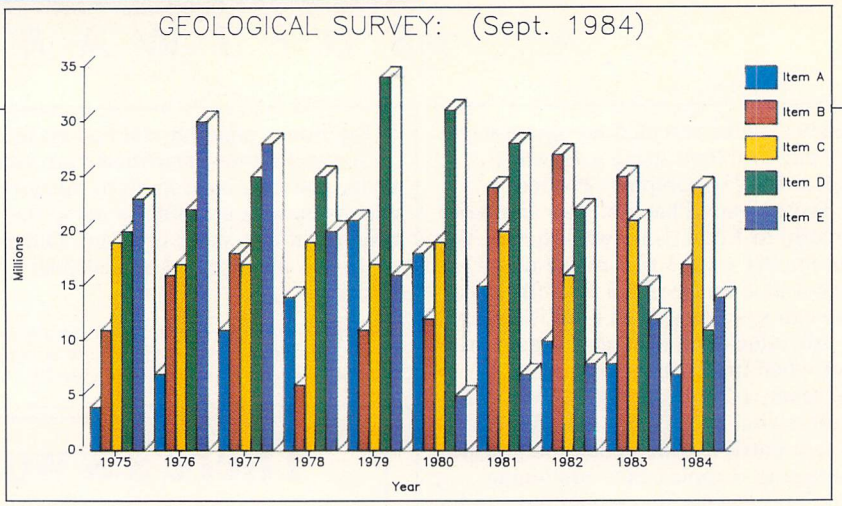
Stella Business Graphics

Turns Numbers into Graphs

Stella Systems
10430 S. De Anza Blvd., #185
Cupertino, CA 95014
408/257-6644

Computers: IBM PC, PC-XT, PC-AT and compatibles.
Operating Systems: PC-DOS or MS-DOS version 2.0 or higher.
Media: Requires one diskette drive or a hard disk.
Copy Protection: None.
Required Peripherals: IBM CGA, EGA or other 100 percent compatible board, including Taxan Autoswitch, Video-7 VEGA and VEGA Deluxe, Zuckerboard, Genoa Spectra, Quadram and Paradise.
Other Requirements: Minimum 320K of RAM.
Optional Items: IBM Graphics Printer, Epson FX-85 or other printer 100 percent compatible with the Epson FX-80; Hewlett-Packard LaserJet; Hewlett-Packard ThinkJet; Hewlett-Packard 7440, 7470, 7475, 7550 or equivalent pen plotter; Polaroid Palette film recorder.
System used for test: (1) 640K IBM PC with 20MB hard disk, 360K diskette drive, Everex Graphics Edge color adapter and Epson FX-80+ printer. (2) 640K Compaq Deskpro with 20MB IOMEGA Bernoulli Box, two 260K diskette drives, Video-7 VEGA Deluxe video adapter in EGA mode, NEC MultiSync monitor, Epson FX-85 printer and Hewlett-Packard 7475A Graphics Plotter.
List Price: $99

Reviewed by James Moran and Ernest E. Mau



Generating business graphics: *Stella Systems*

Business graphics fascinate commercial users. Whether integrated into spreadsheet software or contained within stand-alone graphics generators, visual bells and whistles have become a user favorite. As a free-standing graphics package, Stella Business Graphics offers 12 formats for business charts and graphs.

Installation of an early release got off to a bad start because there were more distribution diskettes than the manual called for. A little nosing around revealed an updated installation procedure described on one diskette, but Stella Systems personnel say newer manuals carry the correct procedure.

For those with IBM-compatible dot-matrix printers and CGA video cards, installation consists of merely copying distribution files to a working diskette or hard disk. Users with more exotic printers, non-CGA graphics cards or pen plotters must go through a short customization routine. Either way, installation is completed in a few minutes.

Stella Business Graphics displays spreadsheet data as charts or graphs. Some common charts it creates are conventional area, bar, column, stacked column, line and pie types. Others are step, percentage, donut and deviation charts, with percentage and donut charts being unusual among graphics programs. Stella Business Graphics also produces pictographs from predefined or user-created symbols such as money bags or trucks arranged as column charts. Text charts, like outlines with bullets, also are available.

The software is menu-based, and operation is so simple it is almost intuitive. Twelve generic charts are displayed at start-up, and chart selections can be changed quickly with a few keystrokes. Data can be entered directly from the keyboard or imported from other programs via SYLK (MultiPlan), DIF (Lotus 1-2-3 and others) or ASCII files. Titles and headings for graphs can be constructed with Stella's built-in editor.

As an intermediate step, Stella Business Graphics constructs a spreadsheet from data supplied. That spreadsheet is limited to 50 rows and 50 columns. Owing to screen size limitations, only 10 rows and 5 columns can be displayed at one time. Once the spreadsheet is constructed, users can change the value of any individual cell, which is particularly handy for "massaging" data. Users also can swap rows for columns or select particular rows or columns for graphing.

Titles may be created with different text sizes, but are limited to 60 characters for a small font or 36 for the largest font. Early program releases output only 30 characters to hard-copy graphs, but newer releases of Stella Business Graphics, like version 3.04, can output all characters shown on the screen.

Charting offers numerous options. Up to eight colors can be assigned to various chart segments. Hatching can be toggled on or off for hatched or solid fill on screen, in printed outputs and in plotted outputs. Grids can be applied to the background or omitted. Bar charts can be presented in flat 2-D form or enhanced 3-D form. Donut and pie charts can be "exploded" by having one or more slices pulled away from the main body of the chart. Other options allow footnoting and titling of vertical and horizontal sides of some charts, and borders can be placed around charts or omitted.

Early Stella Business Graphics releases had serious problems with pen plotters. One release plotted only crude hatching, not solids, for area filling. Another provided solids for all but pie and donut charts, but made mistakes correlating chart colors with legend colors.

Version 3.04 finally provides usable plotter outputs, with solid filling for all graphs and accurate color correlation between charts and legends. It also provides an installation option that assigns pen numbers to screen colors. However, it lacks some frills such as controllable pen speeds or widths, with established settings being best suited to paper plots using 0.3 mm pens. It also lacks chart sizing, selectable plotter fonts for text, the ability to plot multiple charts to a single page, selectable software text fonts and some other power features.

Stella Business Graphics does offer charting enthusiasts various ways to display numeric data. Some, like the percentage and donut charts, are particularly attractive. Operation is strikingly simple, and the ability to import data from major software packages can be valuable.

Stella Business Graphics is intended for users who need only modest graphing capabilities. While it is better than some low-end products, it cannot match high-power programs now on the market. Following a recent reduction from $199 to $99, its price seems reasonable for what it offers, yet it is possible that other software may better meet a particular user's needs.

James Moran is the editor of Compu-Syn, a syndicated news service that specializes in computers and robotics. His CompuServe User ID number is 70007,2253. Ernest E. Mau, a full-time free-lance writer and Online Today *reviews editor, is based in Aurora, Colo. He is the author of several books and nearly 300 articles on microcomputer products and applications.*

Trademarks: Compaq and Deskpro (Compaq Computer Corp.); dBase II and dBase III (Ashton-Tate Inc.); Epson FX (Epson America Inc.); Everex Graphics Edge (Everex Systems Inc.); IBM, IBM PC, PC-XT, PC-AT and PC-DOS (International Business Machines Corp.); IOMEGA and Bernoulli Box (IOMEGA Corp.); Lotus and Lotus 1-2-3 (Lotus Development Corp.); MS-DOS and MultiPlan (Microsoft Corp.); NEC and MultiSync (Nippon Electric Co.); Stella Business Graphics (Stella Systems Inc.); VEGA Deluxe (Video-7 Inc.).

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Architectural Design

Helps You Design Your Own Home

Abracadata Ltd.
P.O. Box 2440
Eugene, OR 97402
503/342-3030

Computers: Apple II series; IBM PC compatibles; Apple IIGS version under development.
Operating Systems: AppleDOS 3.3; IBM DOS 2.0 or greater (with 256K RAM).
Media: Program and data diskettes included; Apple II version requires one diskette drive but two drives are recommended.
Copy Protection: Program diskette normally is uncopyable but data diskette is copyable; backup of program diskette costs additional $15; copyable program diskette costs additional $25.
Required Peripherals: Apple version requires mouse, paddles, Koala Pad or joystick (paddles recommended); peripheral data input device is optional for IBM version.
Other Requirements: None.
Optional Items: None.
System Used for Test: Apple IIe with two diskette drives, Apple color monitor, Epson FX-85 printer and Koala Pad.
List Prices: $69.95 for Apple version; $99.95 for IBM PC version.

Reviewed by Brian D. Monahan

Architectural Design is one of three computer-aided design programs in Abracadata's Design Your Own Home series. The others are Interior Design and Landscape Design. In the Apple version, Architectural Design is independent of the others. The IBM PC version includes all three programs on one diskette.

Architectural Design lets you create quick, precise floor plans, top views and side views of buildings. The drawings can be saved as picture files on disk and they can be printed and edited.

Getting started is easy. An Apple user just defines the printer, copies the data diskette if desired, and is ready to go. The program runs from a main menu. By following the manual, the user is taken through the process of designing a house.

Drawing lines is the most basic operation in any design program. To draw lines with Architectural Design, press the Period key to begin, move the cursor to the end point of the line, and press the Comma key. The line segment appears. Thin lines for room partitions, windows or doors can be drawn using the Dash key. Dotted lines are made with the Semicolon key. Perfect right angles are indicated with the Caret key.

After a few lines are drawn, objects can be placed in the "rooms." For example, to place a bathtub, type B. To create a small curved stairway, type 76. There are 146 predefined shapes available. These include geometric shapes such as squares and circles; structural components such as pillars, outlets and light fixtures; and household items such as the bathtub. Shapes also may be combined and rotated.

To go beyond the original shapes, the program includes a customizing utility that lets users design new shapes one dot at a time. Creating a new shape requires giving up an existing one (that does not seem to be a potential problem), and the new shape cannot use more bytes than the one it replaces. Any new shapes created may be saved for future use.

A limitation of the program is the way it scales. If one chooses a rectangle and decides to make it larger or smaller, the operation works well. With user-created shapes, however, scaling causes distortion, so some shapes like arcs, pillars and squares are available in several sizes. Others must be redrawn if a different size is needed.

Another limitation is that the size of a drawing is limited by the size of the screen. There is no scrolling. Also, the Apple version of the program lacks the zoom feature that is included in the IBM PC version.

The program's measuring capabilities are impressive. They are handled by the "dimension calculator." Feet can be measured to one decimal place and angles to two decimal places. Without drawing, you can know immediately how far any screen point is from any other point, what the horizontal and vertical offsets are, and what the measure of an angle is.

The program documentation includes a 40-page manual that works well as a tutorial but not as a reference book. An index is sadly lacking, but an excellent four-sided reference card is included.

Architectural Design requires no special knowledge of drafting or design. I can attest that it is great fun. For those who wish to think about their ideal home in concrete terms, this program is an excellent choice.

However, this program isn't an appropriate choice for professional architects and designers. Slow operating speed and low-screen resolution make it inappropriate for such users, as do the limitations on the size and placement of objects. A conversation with the developer revealed that the program was designed with the help of an architect who wanted a quick, inexpensive way to merely develop concepts. It does seem appropriate for that use and for the casual home user.

Brian Monahan is an associate professor of computer science at Iona College in New Rochelle, N.Y. He also is an elected official in Dobbs Ferry, N.Y. His areas of interest are educational computing and the use of microcomputers by municipalities. He has published numerous articles on those topics in popular and scholarly journals.

Trademarks: Apple, Apple II, Apple IIGS and Apple DOS (Apple Computer Inc.); Epson FX (Epson America Inc.); Koala (Koala Technologies).

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AutoMac II

A Memory-Resident Macro Generator

Genesis Micro Software
106 147th Ave. SE, No. 2
Bellevue, WA 98007
206/747-8512

Computer: Apple Macintosh.
Operating System: The Finder.
Media: Requires one disk drive.
Copy Protection: None.
Required Peripherals: None.
Other Requirements: None.
Optional Items: None.
System used for test: Macintosh Plus with 880K internal drive and 440K external drive.
Retail Price: $49.95

Reviewed by Cheryl Peterson

As a macro recorder, AutoMac II remembers and then repeats keypress sequences, so you can assign whole processes to single keystrokes. Once you've recorded keypresses needed to achieve a goal, it is simple to repeat the goal later. To reproduce a recorded process, just press the option key and the key to which you assigned the macro. It is easy to do, once AutoMac II has been installed.

Since AutoMac II is a memory-resident utility that is loaded when you first boot the system, it should be assigned as the autostart program on your disks. It can be set to call another application once it is loaded.

While other applications are running, AutoMac II remains hidden in the background. Pressing the option key and the "+" key simultaneously brings up AutoMac II's menu page. From this, you can record a new macro or choose one that exists and run it.

When you record a macro, you give it a name, to help you remember it, and assign it to a keyboard letter. The menu lists all macros you've saved for the application currently running. You can have up to 43 macros per application file, so being able to view the available macros is a real plus. You also can load alternate sets of macros when you need more than 43 for an application.

Macros you create aren't saved to disk until you use the "save" or "save as" feature. The program warns you if you've added macros without saving them and try to use the normal Macintosh "Quit" function. If you're inclined to quit an application by turning off the machine, however, you may lose some macros.

Recording macros is easy. From the menu, choose the "record a macro," indicate a key assignment, and give it a description for later identification. Any desired time delays and key numbers must be indicated at this time by clicking on the appropriately labeled box. When you've finished, AutoMac II returns you to your application right where you interrupted it.

From there, AutoMac II remembers all keystrokes and mouse clicks as they occur until the option and backspace keys are pressed simultaneously to mark completion of the macro.

With a little roundabout clicking, AutoMac II even works with Switcher to move back and forth between programs. The manual explains this in adequate detail. Such switching can close programs and load new ones, move information between applications, set page formatting, or even create new spreadsheets or databases.

I tried using AutoMac II to animate drawing functions with a computer-aided design package. It worked admirably. Even changing brush sizes and choosing fill patterns were made easier. Working with MacWrite was greatly simplified as well.

One thing the program can't do is grab and move objects that change position on the screen. If you grab and move a circle and then try to repeat the process, it won't work because the circle isn't in the same screen location. While AutoMac II can detect mouse clicks, it can't reproduce direction and dragging movements of intangible objects.

The manual is small but well done. It includes everything you need to know plus frequent reminders about data safety and working from backup disks. Several appendixes, a quick reference card and an index are helpful. One section suggests AutoMac II uses, including processes you might want to automate in several popular Macintosh application programs.

AutoMac II is not protected and can be copied onto just about any application disk. This is necessary because it must be able to find its work files whenever it accesses the menu.

I think AutoMac II is a utility that anyone who uses a computer for repetitive tasks should consider having. Before I knew the price of the package, I guessed that it should sell for around $50. Happily, it is priced at $49.95, and I heartily recommend it as a good value.

Cheryl Peterson, a free-lance writer from Miami Beach, writes reviews for several computer magazines. Her CompuServe User ID number is 72366.2645.

Trademarks: Apple, MacWrite (Apple Computer Inc.); AutoMac and AutoMac II (Genesis Micro Software); Macintosh (McIntosh Laboratory Inc., licensed to Apple Computer Inc.).

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Electronic Edition Software Reviews

The following reviews are available this month on *Online Today Electronic Edition* by typing GO OLT-230 at any CompuServe Information Service prompt.

SmartScrap and The Clipper Scrapbook Aids
Manufacturer: *Solutions Inc.*
Computers: *Various Apple Macintosh computers.*

Turbo Basic and QuickBASIC Compilers
Manufacturer: *Borland International Inc. and Microsoft Corp.*
Computers: *IBM compatibles.*

Finance 10 Financial Utilities
Manufacturer: *Creighton Development Inc.*
Computers: *IBM compatibles.*

Finance Manager II Accounting
Manufacturer: *Hooper International*
Computers: *IBM and compatibles.*

Enable 2.0 Integrated Software
Manufacturer: *The Software Group*
Computers: *IBM compatibles.*

RightWriter 2.1 Writing Style Analyzer
Manufacturer: *RightSoft Inc.*
Computers: *IBM compatibles.*

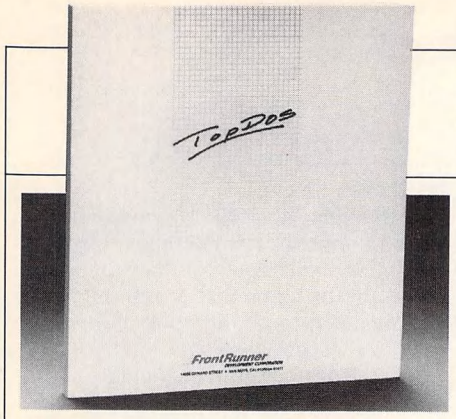
Quicksilver Database Compiler
Manufacturer: *WordTech Systems Inc.*
Computers: *IBM compatibles.*

Lotus HAL System For 1-2-3
Manufacturer: *Lotus Development Corp.*
Computers: *IBM compatibles.*

Time Line Graphics Project Management Plotting
Manufacturer: *Breakthrough Software Corp.*
Computers: *IBM compatibles.*

WindowDOS 2.0 Disk Utilities
Manufacturer: *WindowDOS Associates*
Computers: *IBM compatibles.*

SNAP Hard Disk Management
Manufacturer: *The Mt. Whitney Group*
Computers: *IBM compatibles.*



Enhancing management: *TopDOS*

TopDOS

Enhances DOS for the IBM PC and Compatibles

FrontRunner Development Corp.
14656 Oxnard St.
Van Nuys, CA 91411
818/376-1322

Computers: IBM PC, PC-XT, PC-AT, Compaq 386 and 100 percent compatibles.
Operating System: PC-DOS or MS-DOS version 2.0 or higher.
Media: Requires one diskette drive or a hard disk.
Copy Protection: None.
Required Peripherals: None.
Other Requirements: Memory-resident program occupies 39K of free RAM.
Optional Items: None.
System used for test: 640K IBM PC with one 360K diskette drive and one 20MB hard disk; running PC-DOS 2.1.
List Price: $69.95

Reviewed by James Moran

TopDOS (version 2.00) is a DOS enhancement and hard-disk management tool. It can simplify hard-disk management by providing graphic displays of subdirectories and files. Working with disk data is easy because Move, Copy and many other standard DOS facilities are available through macro-like commands. TopDOS also includes features that save power users time, and it alleviates some frustrations when using the limited facilities of various DOS commands.

Installation is simple, and TopDOS automatically configures itself for most hardware arrangements. The system supports Microsoft and equivalent mice, as well as Hercules, IBM CGA, IBM EGA and equivalent displays.

TopDOS will support a local area network with no special installation. Although I didn't try the software on a LAN, the developer warns that TopDOS must not be used on a workstation that is directly attached to the LAN's file server. This shouldn't be a problem with most LANs since they're not usually configured in such a manner. Another unusual bit of support, at least for a file manager, is that the TopDOS file management facility is supposed to support up to a gigabyte (one billion bytes) of hard-disk storage.

The first thing I noticed when I activated TopDOS was how simple it was to deactivate. There are times when I don't want it hanging around examining each keystroke I enter. For instance, a [CONTROL-P] keystroke normally tells DOS to send output to the printer, but the same key combination has a different, conflicting meaning in TopDOS. To get around such conflicts, TopDOS can be instructed to be quiescent until it is actively called up again, or it can be temporarily quieted for a single keystroke. In the latter case, the first keyed character will be ignored, but all following ones will not. Incidentally, when the program is active, the normal "C>" prompt is replaced with "C>>" for visual identification.

A feature sure to be appreciated is the TopDOS editor. In effect, it is a single-line word processor. Standard DOS doesn't provide much flexibility for editing command lines, but TopDOS does. It can move the cursor forward or back, jump to the beginning or end of the command line, transpose adjacent characters and even cut and paste from two 80-character buffers.

The editor is particularly useful with the TopDOS "History" command, which displays roughly 200 of the most recently keyed commands. Each command is displayed with a two-digit sequence number in front of it and can be inserted into the current command line by keying that number.

Handiest of all the editing features is the ability to view a previous screen. By pressing the PgUp key, you can view information from a previous screen that has scrolled off the monitor. That one facility could eliminate enough frustration to make TopDOS worthwhile for many users.

There are several other features that I found especially useful. The one I liked best locates a file anywhere on a disk. For example, by keying "WHEREIS C:* .TXT", I get a list of all files that have a "TXT" extension. The command ran through my entire 20MB disk, including subdirectories, in about five seconds. Other DOS extensions provide directory sorting, visual tree displays and lots of other handy features. The folks at Microsoft Corp. should take a good look at TopDOS to see some truly practical commands.

Much as I liked TopDOS, I didn't keep it on my system. It uses 40K of scarce memory, and I just can't afford that much memory loss. In fairness to the product, it uses much less memory than similar but less feature-rich products. If the developer could cut the memory requirement in half, I think the product would find a much wider market. Still, if you're not already saturated with RAM-resident utilities and your word processor or favorite spreadsheet doesn't require too much memory, you'll love TopDOS.

James Moran is vice president of Programming Service Corp., a Midwestern consulting and research firm. His CompuServe User ID number is 70007,2253.

Trademarks: Compaq and Compaq 386 (Compaq Computer Corp.); IBM, IBM PC, PC-XT, PC-AT and PC-DOS (International Business Machines Corp.); MS-DOS (Microsoft Corp.); TopDOS (FrontRunner Development Corp.).

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202 East 39th St.
NY, NY 10016

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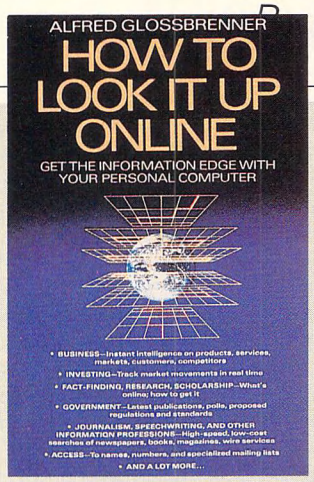

ALFRED GLOSSBRENNER
HOW TO LOOK IT UP ONLINE
GET THE INFORMATION EDGE WITH YOUR PERSONAL COMPUTER
• BUSINESS—Instant intelligence on products, services, markets, customers, competitors
• INVESTING—Track market movements in real time
• FACT-FINDING, RESEARCH, SCHOLARSHIP—What's online; how to get it
• GOVERNMENT—Latest publications, polls, proposed regulations and standards
• JOURNALISM, SPEECHWRITING, AND OTHER INFORMATION PROFESSIONS—High-speed, low-cost searches of newspapers, books, magazines, wire services
• ACCESS—To names, numbers, and specialized mailing lists
• AND A LOT MORE...

Databases demystified: *Glossbrenner*

How To Look It Up Online

By Alfred Glossbrenner
St. Martin's Press, 1987
486 pages, $14.95 (softcover)
Reviewed by Lindsy Van Gelder

Alfred Glossbrenner has done it again. The author of *The Complete Handbook of Personal Computer Communications* now brings us a fact-packed guide to online database services that is not only demystifying but often downright charming.

How To Look It Up Online is well organized into three sections. The first, "Essentials," is an introductory overview to the thousands of information services and databases available to those with the equipment and the knowledge to use them. Glossbrenner has suggestions on where to get the best deal on a used modem, what communications software does the best job of searching a database (unfortunately, he only discusses a few programs for each type of computer), how much you should be prepared to pay for online information (except for CompuServe and Dialog's Knowledge Index, Glossbrenner finds the prices inflated), how to compare services when you're database-shopping, why fields are the key to an efficient search, and how to choose an information broker.

Glossbrenner likes to save his readers money. One chapter, "Zen and the Art of Information Retrieval," tries to get the reader thinking — Glossbrenner tongue-in-cheek calls it "meditating" — *before* he or she starts incurring connect charges. The author does a great job of raising the spectre of the mistakes most of us make as new users and heading us off at the pass.

Section II, "Profiling the Majors," includes in-depth information on Dialog, BRS, NEXIS, ORBIT, the Dow Jones News/Retrieval Service, VU/TEXT, NewsNet and Wilsonline, as well as tips on dialing all of these services from overseas.

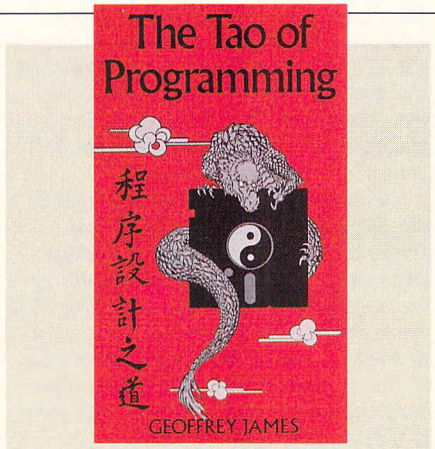
The third section, "The Information," approaches the subject from a different perspective: how to find books on "any subject, anywhere in the world"; how to locate magazine and newspaper abstracts and articles online; how to use directories of people, places, organizations, companies, federal agencies and much more.

An appendix tells how to download information from a database to Lotus 1-2-3, dBase, Chart-Master and other programs. And if you think *How To Look It Up Online* has missed anything, still another appendix points you to a database of all the databases the book hasn't mentioned.

Although the depth of Glossbrenner's knowledge is sometimes overwhelming (he frequently doles out command-by-command walkthroughs), the organization of the book makes it easy to look up what you think you want to learn (about a particular online service or a particular type of information) without wading through a morass of irrelevant material. But Glossbrenner's breezy, populist style invites serious browsing — as do the boxed-off "Online Tips" he sprinkles throughout the book.

How To Look it Up Online is a rare combination of painstaking and painless.

Lindsy Van Gelder is a New York-based free-lance writer and a contributing editor of Ms. *magazine. Her CompuServe User ID number is 70007,1416.*



Computer Meditation: *James*

The Tao of Programming

By Geoffrey James
Info Books, 1987
150 pages, $7.95 (softcover)
Reviewed by John Edwards

Ummmm. Ummmm. Hmmmm? Oh, 'scuse me. Like, I was just meditating, know what I mean? Of course you do.

Anyway, it's nice to see that someone else is also into the zen of computers. Geoffrey James has translated and edited a book titled *The Tao of Programming*.

This book, written by an unknown Far East ancient, is filled with all sorts of good stuff that really helps you get into your machine. For example: "The master programmer moves from program to program without fear. No change in management can harm him. He will not be fired, even if the project is cancelled. Why is this? He is filled with Tao." After reading this book, I knew James was full of Tao, too.

James muses on the cosmic forces of hardware and software, corporate wisdom, maintenance, coding and other enjoyable topics. Most of the thoughts take only a page or two to relate, which is fine with me, since I don't have a long attention span.

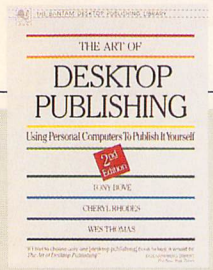
What separates *The Tao of Programming* from other computer books is its depth. While most other texts concentrate on such superficialities as programming techniques, operating system commands and system design, this book tackles the philosophy of what, James claims, started back in "The Silent Void." Consider: "The Tao gave birth to machine language. Machine language gave birth to the assembler. The assembler gave birth to the compiler. Now there are ten thousand languages."

The Tao of Programming is certainly not for all readers. Some will not appreciate the subtle beauty of the text. But then, I suppose such readers would also not appreciate the beauty of the lotus blossom.

As the book notes: "The wise programmer is told about Tao and follows it. The average programmer is told about Tao and searches for it. The foolish programmer is told about Tao and laughs at it. If it were not for laughter, there would be no Tao."

Anyway, like, heavy. Ummmm. Ummmm.

John Edwards, a New York-based writer, is a contributing editor of Online Today. *His CompuServe User ID number is 70007,412.*



Practicing publishing: *1987 edition*

The Art of Desktop Publishing

By Tony Bove, Cheryl Rhodes and Wes Thomas
Bantam Books, 1987
296 pages, $19.95 (softcover)
Reviewed by Michael Naver

The authors of *The Art of Desktop Publishing* practice what they preach. They produced both the first and second editions of this book using desktop publishing techniques, and they did it with a speed almost unheard of in the book publishing industry. The 1986 first edition took three months to produce; the 1987 second edition took two weeks, according to the authors.

The book was well-received when it first came out, and the second edition is even better. The authors have updated the text throughout to take into account new developments in desktop publishing software.

For example, the book discusses new versions of the most popular and inexpensive publishing systems, such as Ready, Set, Go 3, PageMaker 2.0 and PageMaker for the PC. In the case of PageMaker for the PC, the book was out in a matter of weeks after the software was shipped. As a result, the reader has up-to-date information with which to make purchase decisions.

With their experience as writers and producers of magazines and books using desktop publishing tools, the authors are unusually well-qualified to write on the subject. Their familiarity serves the reader well throughout the book.

The opening chapters discuss page makeup and word-processing software, printers and scanners. The most popular word processors are compared, as are spell checkers, thesauruses, indexing programs and text-search software. Clear explanations are at hand for different methods to transfer text between dissimilar computers, such as between the Macintosh and the IBM PC. It is valuable information for all writers, whether or not they intend to produce a finished publication.

Elsewhere the book gives detailed descriptions of the page makeup programs named above, and compares them to expensive professional typesetting programs. There is helpful information on the use of graphics software to import electronic art into the printed page.

The implications of the desktop publishing "revolution" for writers and publishers are not lost on the authors. They note that the wide availability of publishing hardware and software "has put typography and graphic design in the hands of anyone with access to a personal computer. Now the preparation of information is no longer restricted to publishers, typographers, graphic designers and photographers."

But the authors also note — correctly — that easy access to design tools is no guarantee of good design. Only the skill of the craftsman can assure that. We can all hope that good design standards are maintained as desktop publishing becomes the common method of publication design.

Michael Naver of Baltimore, Md., is editor of Hi-Tech Alert for the Professional Communicator, a newsletter advising corporate communicators and public relations counselors on uses of new technology. His CompuServe ID number is 70007,621.

Electronic Edition Book Reviews

The following book reviews are available this month in *Online Today Electronic Edition* by typing GO OLT-240 at any CompuServe Information Service prompt.

The North American Online Directory: 1987, *R.R. Bowker*

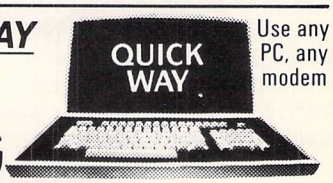
Turbo Prolog: Programmer's Guide, *by Nathan Goldenthal, Weber Systems Inc.*

Proficient C, *by Augie Hansen, Microsoft Press*

Troubleshooting and Repairing the New Personal Computers, *by Art Margolis, TAB Books*

Supercharging MS DOS, *by Van Wolverton, Microsoft Press*

24 HOURS A DAY



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Multispeed Portable

NEC Home Electronics has introduced Multispeed, its latest portable personal computer.

This PC-compatible machine has the fastest processing speed of any competitive portable on the market and features two 3.5-inch floppy disk drives, the MS-DOS 3.2 operating system, detachable screen with high-contrast LCD display, extensive built-in firmware with windowing, 640K of RAM and 512K of ROM and a separate numeric keyboard. Retail price is $1,995.

For information, contact NEC Home Electronics (USA) Inc., 1255 Michael Dr., Wood Dale, IL 60191; 312/860-9500.

Voice Key

Voice Key from Covox Inc. is a machine-language program for the Commodore 64/128 computers.

The software provides voice command capabilities for word processing, game and utility programs when coupled with the company's Voice Master hardware. Residing behind BASIC in the machine's memory, Voice Key leaves the entire BASIC workspace available to the user. Voice Key retails for $29.95, while the Voice Master hardware sells for $89.95.

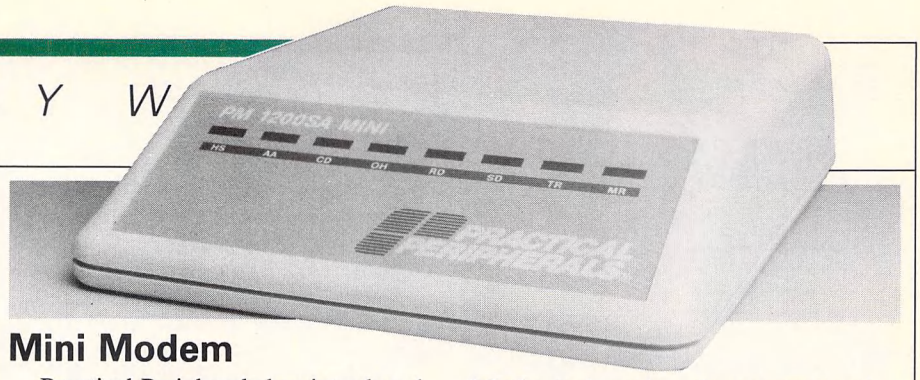
For information or to order, contact Covox Inc., 675-D Conger St;, Eugene, OR 97402. 503/342-1271.

Remote PC Access

The ability to access a PC remotely using a high speed 9600 baud dialup modem is available through a joint effort by modem manufacturer Fastcomm Data Corp. and software designer Triton Technologies Inc.

Using CO/SESSION, Triton's remote control and communications software package, on a PC linked to a remote PC via two Fastcomm 2496 modems allows the user to access or transfer data efficiently at 9600 baud, error-free. It is compatible with any PC DOS/MS DOS 2.0 version or later. Retail price is $249.

For information on the modem series, contact Fastcomm Data Corp., 12347-E Sunrise Valley Dr., Reston, VA 22091; 800/52-2496 or 703/620-3900. For information on the software, contact Triton Technologies Inc., 146 Maple Ave., Red Bank, NJ 07701; 201/741-3232.



Mini Modem

Practical Peripherals has introduced the Practical Modem 1200 SA Mini, a stand-alone, 100 percent Hayes-compatible unit that supports virtually all communications software.

The new pocket-sized modem plugs into the back of a terminal or computer through an RS-232C interface. An RJ-11 telephone interface connects via modular jack to any telephone line. The modem features a baud rate of 1200 or 300 baud and auto-dial/auto-answer capabilities.

For information, contact Practical Peripherals, 31245 La Baya Dr., Westlake Village, CA 91362; 818/991-8200.

AdaptModem

AdaptModem 201/212 from Network Software Associates Inc. is a new auto-dialing synchronous/asynchronous modem for the IBM PC and compatible computers.

The board-level modem incorporates a built-in Synchronous Data Link Control adapter and supports both synchronous and asynchronous communications. It plugs into any full-sized PC expansion slot and functions at 2400 baud in synchronous mode and 300 or 1200 baud in asynchronous.

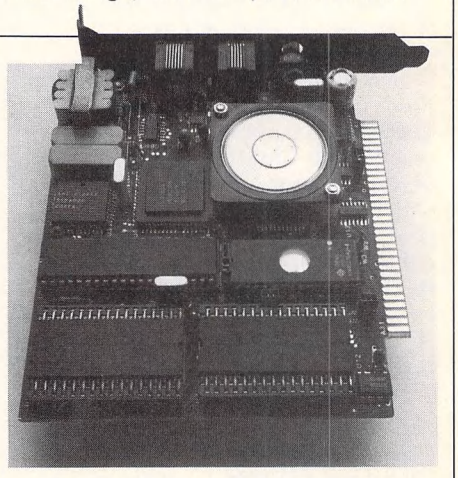
For information, contact Network Software Associates Inc., 22982 Mill Creek, Laguna Hills, CA 92653.

Join the Club

Club AT has introduced the Club 3000 memory expansion board for the IBM PC AT.

Features include 0-3MB memory expansion, the ability to support 64K and 256K RAM chips, split memory addressing and back filling the motherboard to 640K. In addition, the board uses a minimal amount of power enabling the system to run cooler.

For information, contact Club AT Inc., 46707 Fremont Blvd., Fremont, CA 94539; 415/490-2201.



Half-Card Modem

Novation has introduced a 2400 baud half-card modem to its new XE series of 1200 and 2400 baud modems.

The 2400 XE/HC is compatible with the Hayes AT command set and provides a full range of intelligent modem features. It operates in synchronous or asynchronous data formats at both full- and half-duplex. Features include automatic equalization, a full range of automatic dialing and answering capabilities, audio call monitoring and built-in automatic test functions. Retail price is $299.

For information, contact Novation Inc., 20409 Prairie St., Chatsworth, CA 91311; 213/996-5060.

More Perfect

More Perfect from f/22 Press is a collection of macro utilities to be used with the popular word processing program WordPerfect.

Adding More Perfect to WordPerfect increases editing speed and capacity and simplifies printer-feature control. More Perfect adds several essential editing tools that are not available in WordPerfect, including a simple two-key command that kills the line the cursor is on and moves all of the remaining text up one line as well as a two-key command that transposes two letters. More Perfect is available on 5.25-inch disk for the IBM PC, PC-XT, PC-AT and compatibles and sells for $19.95.

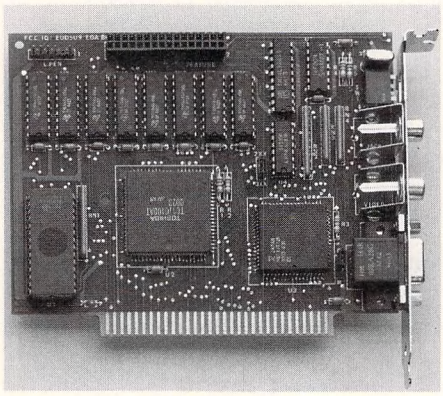
For information or to order, contact f/22 Press, P.O. Box 141, Leonia, NJ 07605.

Enhanced Graphics Adapter

Boca Research has introduced a new Enhanced Graphics Adapter board for a retail price of just $199.

Called EGA by Boca, the unit features 256K RAM and backward compatibility to the Hercules Graphics Card, Color Graphics Adapter and Monochrome Display Adapter. Software provided with EGA by Boca includes screen-saving functions, software-based mode change capabilities, diagnostic routines for troubleshooting and more.

For information contact, Boca Research Inc., 6401 Congress Ave., Boca Raton, FL 33431; 305/997-6227.



PowerDialer

MicroWay Inc. has introduced PowerDialer, which provides Lotus 1-2-3 users with automated dialing of phone numbers stored in Lotus 1-2-3 worksheets.

PowerDialer supports automatic least-cost routing, local or long distance exchange identification and extended local area dialing. The program is ready to use with Hayes compatible modems and sells for $79.95.

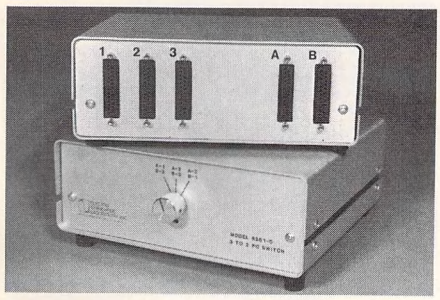
For information, contact MicroWay Inc., P.O. Box 79, Kingston, MA 02364; 617/746-7341.

Xi Plus

Expertech has introduced a new release of Xi Plus, a PC-based expert system shell.

Version 1.5 incorporates a number of new features including removal of copy protection, improved performance with Xi Plus running up to four to six times faster, two new high level interface programs and new graphics interfaces. Retail price is $1,250. Registered owners can upgrade for $95.

For information, contact Expertech at 650 Bair Island Rd., Suite 204, Redwood City, CA 94063; 415/367-6293.



Matrix PC Switch

Electro Standards Laboratory Inc. has introduced a combination switch that allows three IBM PCs to share two printers.

Two PCs are selected at a time, each transmitting its output to its respective printer simultaneously while leaving the third PC available for other applications. A simple flick of the switch changes which two of the three PC systems are connected to the two printers. Called the Model 8381-D 3x2 PC Switch, the unit sells for $145.

For information, contact Electro Standards Laboratory Inc., P.O. Box 9144, Providence, RI 02940; 401/943-1164.

Email software

PC COMplete (Version 3.61) from Transend Corp. is PC-based electronic mail software that fully automates the exchange of electronic messages and files.

The program combines full-screen text editing, address lookup, message filing, powerful macros, a DOS shell and general purpose communication functions in one single, easy-to-use package. A custom version has been released for CompuServe's EasyPlex and InfoPlex and sells for $99 and $125 respectively. Version 3.61 retails for $299.

For information, contact Transend Corp., The Village Square, 884 Portola Rd., Portola Valley, CA 94025; 415/851-3402.

Cell/Mate

Clarity Software Corp. has introduced a new release of Cell/Mate that supports expanded memory.

The program produces automatic English documentation of Lotus 1-2-3 and Symphony worksheets as well as providing over 30 error-checking reports. Release 2.0 supports the Intel Above Board, the AST Rampage Board and other expanded memory boards conforming to the LIM standard. It also includes significant performance improvements and supports new features available in the latest 1-2-3 and Symphony releases, including the retrieval of password protected files. Retail price is $89. Cell/Mate is designed for the IBM PC or compatibles.

For information, contact Clarity Software Corp., 13276 Research Blvd., Austin, TX 78750; 800/822-7890 (nationwide) or 512/331-0465 (in Texas).

Electronic Edition Product Announcements

The following new product announcements are available this month in *Online Today Electronic Edition* by typing GO OLT-250 at any CompuServe Information Service prompt.

eaZy pc, *compact one-piece PC/XT-compatible personal computer, Zenith Data Systems.*

Lap-Link, *advanced, high-speed serial transfer kit to link any two IBM PCs or compatible computers, Traveling Software.*

Masterlink, *smart cable for use with the new IBM PS/2, MicroPlot.*

Baker's Dozen, *13+ powerful utility programs for the IBM PC and compatibles, ButtonWare.*

FontPac (Version 1.0), *allows the generation of more than three billion fonts for a laser printer, Metro Software Inc.*

Rely Drives, *line of high-capacity external SCSI drives for the Macintosh, Rely Technologies.*

Z80 Card, *allows operation of CP/M programs on an IBM PC or compatible, Micro Solutions Computer Products*

Midas Portable*portable IBM XT/AT compatible personal computer, CAD/CAM On-line Inc.*

Macintosh Valet, *a system that holds the Macintosh six to eight inches off the desktop, creating a clear workspace, MicroComputer Accessories Inc.*

Monoputer, *provides parallel processing for the IBM XT, AT and compatibles, MicroWay Inc.*

SHOPPER'S GUIDE

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(Reviewed by PC Week on 5/19/87)

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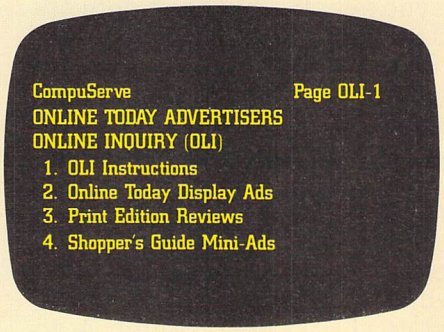
Guidelines to Requesting Information Through OLI

Online Inquiry

Online Inquiry is *Online Today*'s electronic version of the traditional reader inquiry card. To request additional information about products or services described in *Online Today*, simply access CompuServe and type GO OLI at any prompt.



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GO OLI-160. Inquiries to this section will be followed by a brief description of the *Online Today* ad. To request additional printed information, simply enter your name and address at the prompts. OLI will add your User ID number and electronically forward your request to the appropriate advertiser(s). The names, addresses and User ID numbers will also be forwarded via US Mail at the end of each month.

Editorial Articles/Reviews

At the end of each electronic version product review, you'll be asked if you wish to request further information through the Online Inquiry system. A "yes" response will let the system prompt you for your name, address and other information so that your request can be forwarded to the appropriate company. If you respond "no," the system will return you to the previous menu.

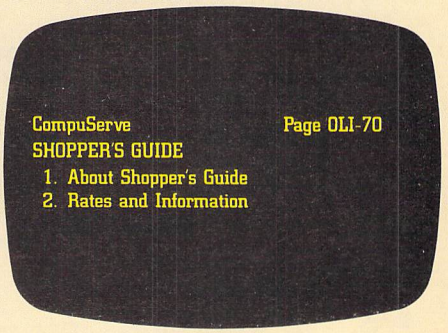
To request information about products reviewed in the print edition, go to page OLI-280 and select the appropriate listing, such as September Hardware Reviews. At the next menu, select the product you're interested in. If you answer "yes" at the question prompt, the OLI system will prompt you for the necessary information.

Requests to these sections will be stored and forwarded by traditional mail once each month.

Shopper's Guide

GO OLI-70 to get information about *Online Today*'s mini-ad program.

To request information from Shopper's Guide advertisers, follow the instructions outlined in each ad.



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The Super Modem 2400 automatically adjusts itself to match terminal's (or computer's) baud rate, parity and stop bits. The default setting is CCITT 2,400 bps but all parameters can be changed in the modem's non-volatile memory by using the extended "AT" command set. 11 status LED's are provided: Auto answer, off hook, high speed, DSR, RTS, DCD, TD, RD, RI, CTS and DTR. Switches are provided for constant carrier, holding DTR high, crossing pins 2 and 3, 11 bit characters and auto answer.

The modem is fully compatible with the Hayes® "AT" command set at all speeds and uses the new Hayes® 2400 commands for synchronous operation making the Super Modem 2400 compatible with virtually all IBM PC communications software. An internal speaker with software selectable volume is included. The Super Modem 2400 has an on-line help screen which shows communication parameters.

Super Modem 2400 Specifications

OPERATION: Full duplex sync or async on 2 wires
DATA RATES: Synchronous 2400 bps or 1200 bps; asynchronous 2400, 1200, 600 or 300 bps.
MODULATION: FSK and PSK
CHARACTER FORMAT (ASYNC): 10 or 11 bits including start and stop bits
EQUALIZATION: Automatic adaptive
DIAGNOSTICS: Self test, local and remote analog and digital loopback
DCE interface (stand alone models) EIA RS232C
VF interface 10 foot cable with RJ-11 jack. FCC approved
DIMENSIONS: 8½" x 6¼" x 1½" – weight 1.5 lbs. (0.69 Kg.)

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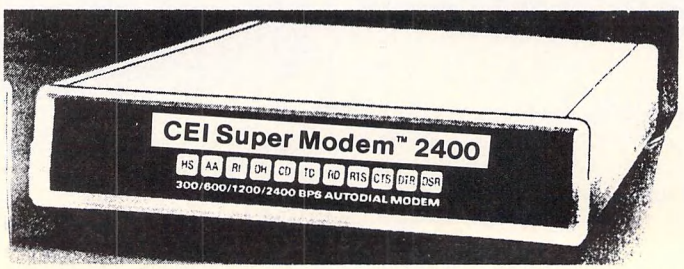

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September issue, not valid after December 1987.

New Graphic Capabilities Paint Pretty Pictures in the Forums

Well, now, young fella, when *I* was a boy, starting out in personal computing with my Radio Shack Model I, graphics were a pretty straightforward undertaking.

Most images were white on black (though there were a few trendsetters around making the scene with their green screens), and the pictures were simple. About all you had to remember was that -*- was The Enterprise and <+> was a Klingon warship. Nearly everything else was played out in the theater of the imagination.

If you want to better understand what we used to call *future shock*, just look at what's happened with high-resolution computer graphics in the past seven or eight years. On relatively low-cost personal computer systems, you now can get photo-quality pictures on the screen, even from online sources.

A few years ago, about the time I was upgrading my computer to a high-resolution system, CompuServe introduced fine-lined RLE ("Run Length Encoded") graphics that could be viewed online with the appropriate hardware and software. (Viewing RLEs was discussed in this column, incidentally, in the January 1987 issue of *Online Today*.)

I remember calling in friends to marvel as we logged on to let the system draw a neat black and white weather map. I joined the chorus in concluding that surely CompuServe had, as the old show tune says, gone just about as far as it could go. (One would think by now I would have learned that in matters of computing, such pronouncements are almost always wrong.)

Earlier this year, CompuServe's graphics wizards one-upped themselves, introducing a remarkable new protocol that promises to make the earlier RLE graphics look about as simple as my old Star Trek armada. Not only can the new method produce full-color graphics online, but also can reproduce them in detail actually beyond the capability of most of today's computers, meaning that this protocol may serve our needs for years to come.

It's called GIF (pronounced, "Jif"), standing for "Graphics Interchange Format," and it's intended as a standard for exchanging raster-based images among various computers. In other words, a picture created on an Atari ST system can be downloaded and displayed on an IBM PC or a Commodore Amiga.

Intriguing points about GIF are:

- It looks to future technology by being able to preserve images with a resolution well beyond the capabilities of most of today's small computers. The GIF format can define images of more than 16,000-by-16,000 individual dots. (Compare this with the average microcomputer screen of 320-by-200 pixels. In fact, even advanced laser printers usually are limited to about 2,000 by 3,000 pixels.)

- But at the same time, it has its feet firmly planted in today's world. While GIF can handle up to 256 simultaneous colors, the software makes the best use of a computer's own capabilities. That means that if a downloaded graphic has more colors than the receiving computer can display, the software takes its best shot. (Obviously, some detail will be lost, but the image is still recognizable.)

- It's cost-minded, using a sophisticated compression method to reduce the file size to between a half and an eighth of the original size, saving in download time. For instance, a detailed 16-color graphic might take up 32K of disk space on the computer that created it, but GIF requires only an 8K file to share online.

Public domain software for viewing and creating GIF graphics is available for four groups of computers—the IBM PC and compatibles with CGA or EGA graphics cards, the Commodore Amiga, the Atari ST and the Apple Macintosh family. More systems, such as the new Apple IIGS, are being added.

The place to go to check on what new systems have been added to the GIF audience and to seek answers to other questions about the format is the Picture Support Forum. It provides the software for seeing and making GIFs, hundreds of digitized pictures to look at and a section of its busy message board for comments and questions.

If you have a high-resolution system and want to see what all the shouting is about, visit the forum (GO PICS) and check out Data Library 1 for a viewing program that will work with your system. (Browsing and using the name of your computer system as a keyword should do the trick.) For instance, SHWGIF.EXE is for downloading by users of IBMs and compatibles.

Also of interest in the Picture Support Forum are several description files in DL1: WISGIF.TXT is a question-and-answer tutorial on the new method and GIFSTD.TXT is a more technical 20K explanation of the format.

Besides the Picture Support Forum, many of the machine-specific forums also accommodate the new graphics. Throughout the system, the actual picture files in the databases all have the extension of ".GIF", so entering BRO *.GIF will introduce you to a particular forum's gallery.

GIF is designed only for offline viewing—that is, you download the *.GIF files of interest, log off and then view them with the software written for your machine. However, watch for online GIF viewing to be available. CompuServe and third-party programmers already have started working on communications programs that will permit viewing of the files without first downloading them. Real-time GIF files are generated by programs on CompuServe's host computers. Examples are weather maps and financial charts.

One other file in the Picture Support Forum should be noted if you're interested in other kinds of online graphics. PROGS.TXT in Data Library 1 is a textfile that identifies by name scores of software utilities elsewhere in the library for viewing, encoding and decoding assorted graphics. The file names programs for a variety of computers, including IBM and compatibles, Macintosh, the Radio Shack Color Computer, Commodore Amiga, Apple II, Atari, TRS-80 Models III, 4 and 16, Texas Instruments 99 and others.

Finally, to stay on top of the latest in online graphics, two tips: visit the forums that support your specific computer and look for subtopics devoted to graphics. Also, use the FIND command (as in FIND GRAPHICS) at any CompuServe prompt.

Charles Bowen, co-author of How to Get the Most Out of CompuServe *and* Advanced CompuServe for IBM Power Users, *is a contributing editor of* Online Today. *His CompuServe User ID number is 70007,411.*

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Select the Schedule that fits your needs!

STEP	YOU COMMAND	AND THE OAG ELECTRONIC EDITION RESPONDS
1.	Just enter /S to start.	OAG will want to know your departure city or code name.
2.	Enter your departure city or code; e.g., Dallas or DFW.	Now OAG will want your destination city.
3.	Enter your arrival city's name or code; e.g., Denver or DEN.	OAG will ask when you're leaving.
4.	Enter your departure date; day first, then the 3 letter abbreviated month, such as 27 JUL.	OAG will require your departure time.
5.	Enter your departure time, for example, 8A or 8P.	Choose the flight that's best for you! OAG will display up to 6 lines of flight schedules with departures closest to the time you requested ... listed from earliest to latest!

TRY THE FAST PATH METHOD TO FIND SCHEDULES:
/S departure city; destination city departure day month time [RETURN] e.g. /S Dallas; Denver 27 JUL 8a [RETURN].
WANT TO KNOW THE FARES FOR A FLIGHT?
Select a flight and then see which fares apply to that flight by entering F and the line number e.g., F2 [RETURN].
To find your other options to continue, enter ? (RETURN) or HELP [RETURN].

Choose the best fare!

1.	Simply enter /F.	OAG will ask for your departure city or code.
2.	Enter the departure city or code; e.g., CHICAGO or ORD. The 3-letter code must be an official city or airport code.	Now OAG needs to know your destination city.
3.	Enter the name or code of your destination city; e.g., Dallas or DFW.	OAG will request your departure date.
4.	Enter your departure date — day, followed by the 3-letter abbreviated month, e.g., 27 JUL. If your departure date is unknown, simply enter 99 to view all fares.	OAG will ask you to select an option from the fare menu.
5.	Choose from one of 10 fare categories: 1-5 on the left show direct and connecting flights fares; 6-10 display direct flight fares only. Use category 5 to see all the fares in a city pair.	The system will want to know the type of trip you want to take.
6.	Enter the line number of the trip type: one-way, round-trip ... or other!	A list of fares for the selected flight will appear ... up to 8 lines listed from least to most expensive. Choose the one that's right for you!

TRY THE FAST PATH METHOD TO FIND FARES ON A SPECIFIC DAY:
/F departure city; destination city departure day month fare category [RETURN]. e.g., /F Chicago; Dallas 27 JUL 5 [RETURN].
FOR FARES ON ALL DATES:
/F departure city; destination city 995 [RETURN]. e.g., /F Chicago; Dallas 995 [RETURN].
WANT TO KNOW THE SCHEDULES FOR A FARE?
Just enter S and the line number (e.g., S2).
To find your other options to continue, enter ?[RETURN] or HELP [RETURN].

Check availability and price of an airline seat — and book your own flights — 24 hours a day!

1.	Start at any screen that lists schedules; e.g., /S Phoenix; Chicago 15 Nov 8A.	OAG will display the schedules you requested.
2.	Now enter B and the line number of the flight you're interested in; e.g., B3.	You've just entered the OAG Reservation Booking System.
3.	Enter the number of seats you want ... to a maximum of four e.g., 3.	OAG will ask you the type of trip you're planning; one way, round trip or other.
4.	Enter the line number of trip type; e.g., 2.	A list of fares for the selected flight will appear. Check the status column to see if a seat is available for the fare you want.

Now you know if there are any seats left on the flight you want and the fare for those seats. Want to check another flight? Just enter an S command and the OAG ELECTRONIC EDITION will allow you to choose another flight from the schedule display.

To complete booking your own airline reservation, just follow easy steps 5-7. When the confirmation number appears, you'll know a reservation has been made and ticketing will be completed by the method you've chosen.

5.	Enter B and the line number of the fare you want; e.g., B2.	Now OAG needs to know the traveler's name.
6.	Enter traveler's name, e.g., Mr. M. Jones.	OAG will request the telephone number.
7.	Enter telephone number as follows: Home-H, Business-B, e.g.; B 312-543-6000, x 234.	OAG will ask you to verify your entries. Wish to make a change? Enter the number of the item and press RETURN to continue.

TRY THE FAST PATH METHOD TO FIND SEAT AVAILABILITY:
From any schedule screen, enter: B and the line number; the number of seat; the trip type; return date; time [RETURN]. e.g., B1; 1;2;24 JAN; 6p.

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The OAG ELECTRONIC EDITION is Free* September 13-19

Select the ticketing option that's best for you — and even request hotel and car rental reservations!

STEP	YOU COMMAND	AND THE OAG ELECTRONIC EDITION RESPONDS
1.	Once you've booked a flight, a ticketing menu will appear. To find out more about an option, enter X and the line number of the ticketing option.	OAG will display a description of the ticketing option.
2.	Select the ticketing option of your choice.	OAG will prompt you for the information needed to complete the booking. Information will vary according to the ticketing option you've selected.
3.	A confirmation number will appear. Once this display appears, your reservation is complete.	Record your confirmation number or date of travel for future reference.
4.	To review or cancel your reservation at any time enter /C.	OAG will display a "Reservation Cancel/Review Menu."
5.	To review a reservation, enter 1; to cancel, enter 2.	OAG will prompt you for the departure date of the first flight on the itinerary or for the confirmation number.
6.	Enter either the departure date of the first flight on the itineray or the confirmation number.	The flight confirmation number and itinerary will be displayed. If you entered a 2 to cancel, a C command will show up.
7.	To cancel your itinerary, enter C. Enter /Q to exit.	OAG will display "flight departing (date) has been cancelled."

View hotels and motels throughout the world!

1.	Just enter /H to get started.	OAG will ask you what city you're visiting.
2.	Key in the name or official 3-letter code of the city you plan to visit; e.g., Chicago or CHI.	Now OAG will ask you to choose the hotel location you want!
3.	Enter the hotel location that's best for you — in a city, near the airport, or in a nearby suburb or resort. Just enter the appropriate line number (e.g., 1).	OAG will display a list of hotels and motels in your category alphabetically. You can view each property's name, address, location, quality rating, and the range of room rates. You can request the listing for your favorite hotel chain simply by entering +name (e.g., +Hilton).

TRY THE FAST PATH METHOD TO FIND HOTELS IN A SPECIFIC CITY CENTER:
/H city; 1 [RETURN] e.g., /H Chicago; 1 [RETURN]. For a specific hotel in a city center: /H city; 1; hotel [RETURN] e.g., Chicago; 1; Westin [RETURN].

WANT MORE INFORMATION ON A HOTEL OR MOTEL CHAIN?
Just enter X and the line number and the system will respond with an expanded display e.g., X1 [RETURN].

Summary of commands

COMMANDS TO GET YOU STARTED:

/I for information and assistance
/S for schedule displays
/F for fare displays
/H for hotel/motel displays
/M to return to OAG command menus
/C to cancel or review a confirmed reservation
/U for user comments and suggestions
/Q to exit from the OAG ELECTRONIC EDITION

LINE NUMBER (#) ENTRIES, AVAILABLE FROM A SCHEDULE OR FARE DISPLAY

The symbol (#) represents the line number of a flight or fare. The symbol # is never keyed to your entry. Enter the corresponding line number when you see this symbol.

F# display fares for the schedule on the line number
S# display schedules for the fare on the line number
X# expand display of schedule, fare, or hotel/motel on the line number
L# display the limitations for the fare on the line number
R# display the return schedule for the fare on the line number
B# to view availability and/or book the flight on the line number

OTHER ENTRIES

\+ scroll to next sequential display
— scroll to previous sequential display
0 scroll to original display
RS display return schedules
RF display return fares
CX display connections when viewing direct flights
DF display direct flights when viewing connections
C to cancel an itinerary (used in booking dialog only)
H display hotel/motel listings (used in hotel dialog only)
M to return to fare or hotel menu
HELP for assistance while on-line
? for decoding city, airport, airline, meal, aircraft, and fare class code. e.g., ?UA [RETURN]

NEED HELP?

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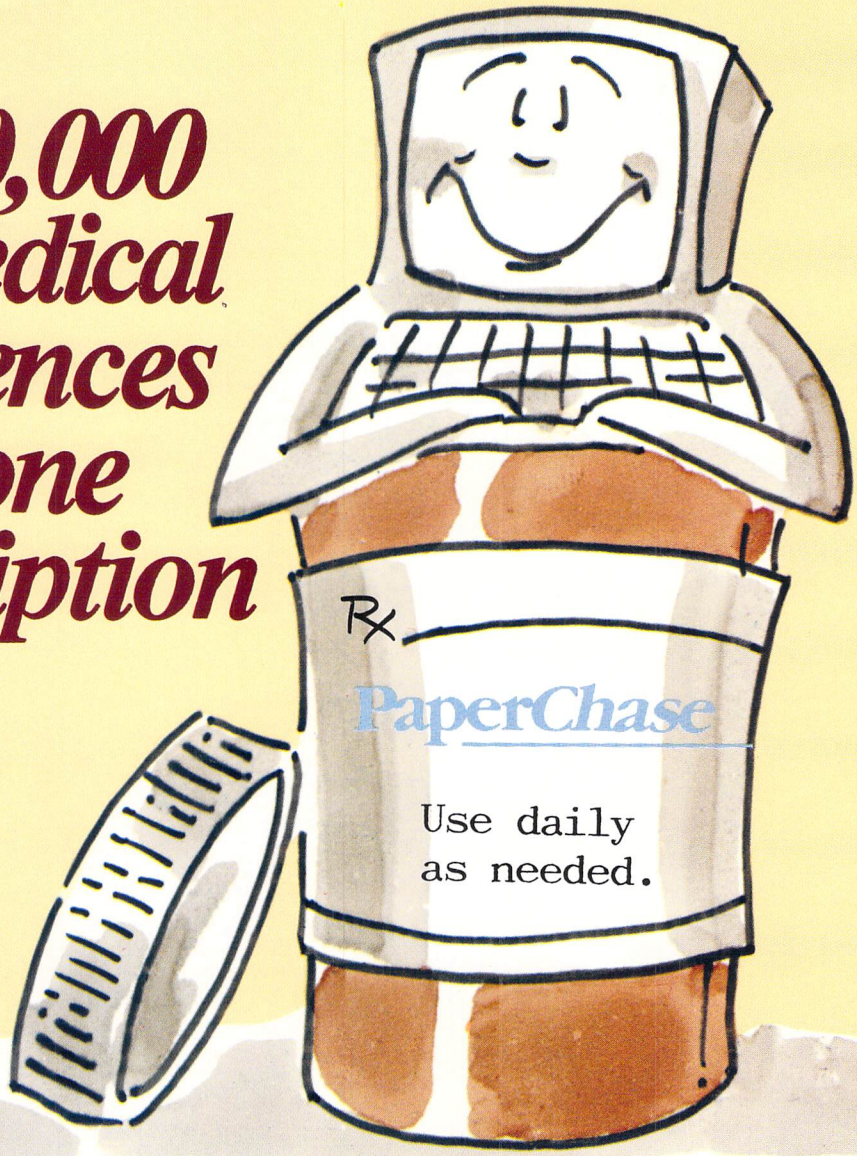

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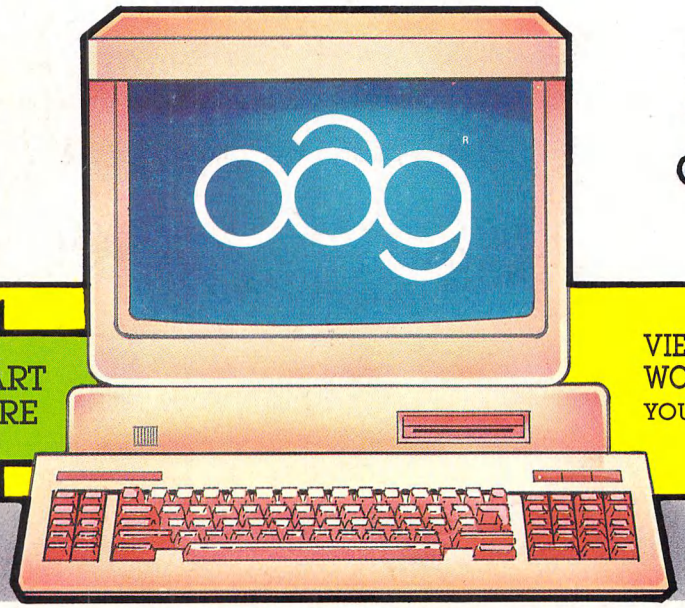

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